

---

```
<project name="chifoumi3" app="Snap! 6, https://snap.berkeley.edu"
version="1">
<notes/>
<thumbnail>
ovlvAAAZE01EQVR4n02deVhTV97H49u3b33eTp9Oh8W2EtupLWOrxXZsKwgubR3tMq221elbp
7ZgsLKIjFONQBWXVtBxaalbVdywIsomuBA17CELSchCiAEDAmLRigSIGKzf9w+a21wSyAUil+
V+nuF3SODec25OPp57zrn3/sICALVajaysLoH0otpCJB1hJiYGDCML1kKhoCxJeXk5khY6IeN
zJ2Qut19UZ50g6jhwd4AddbcIwgLAuXrwItVoNtVqN0aNHY+7cuQgJCQGHw0FkZCRCQkLw0EMP
Qa1W43rJNVQFj0VHRwfairPRkp+Ijqz6dNw3wshlo6P2FxjDX0KrLgtNZ75G46F/wvja7i3b
RYaY4Jg/MYVHXCrvOvdpaURH630YuWzUxYURx6BWq9HY2Eh3uzAMECyhUAiZTAAzTibRo0fjsc
cew6uvvorly5dj586d4HA48PHxQXR0NGJPnULCZj+kJCchKTIAKWD04uzeTTi7dxOSIVw6Y0s
QkqP3IyUuBknBvn+7ce1SIoMRNKW5Ug+/D1SEs4g+cgPSEk+i6QIPyTuj0R0dDTi4uIgFotR
VVVFd7swDBCsxMRECIVCCIVCaDQaJCuloaysjNaIjY2lu116jUKhQEpKygMPPhUJB+Xiys7Mf2
Jj94sWLdmk3VmZmJkyRkJCA0tJS1JaWIjIyEp6ennBwcICzsMCAGlg7OyMX375hdjmQcad03
fs8gYHguLi4j5HZWU1Ehf8Cac/duwxzn/qjJKSEmK/npDJZL0WSrlKHDmLHW20168FuhD7KJX
KfrcdCwd4fd5+/vlnHDhwACU1JSpkCgCOXMwdepUODO6YtWqVFD29oabmxtu3bpFbPMg4+rV
q/1+cwNBYmIiNBoNNBoNWcW8XN3MWFOHNJrhSQX9atdyOSyiQBAem2K1tZWYr/o6Ohujyk1N
ZUYT0+ZMgVKpRLjxo1DWFgYxo8fT7wODg7G2bNnoVarETP/T+RjaG9DR1ur1eMwH69rNjp+tR
/L/EVSUhl0ej0RJSUlzM/Hjx8Hi8VCeXk5azSHUNFWpZ8fcJYLFA3ERERARaLhbFjx2LRokV
gsVjIz8+HTJht8QG331B1K6CpLrFY300xmcB0MpkMLBYLCxYsgEajwy4d01BaWgoOhwONRoN7
9+6hpqYGMpkMSQscSXW1XZfCuPYvVo/DvPz+Lp2RBExMTOzX6cSeodVq+/XGBgoejwexWAyxW
EzI9txz3Ur4tixY7FixQqwWCYIxWKrAgJA08/+Fr9vaWh6uLxeN0ek/m4XqvVIjc3F1qtFm
KxGEVFRVAqldBqtcjPz0dDQwOEQqGFGmbwiZ1hRUBT2UKhEHK5vF/trxiwISEBRUVFKCoqQ1N
jI64sckL2F844s+oDHNr0L+zcuD0ucXQtB91fOCP7C2fc/GEBUXdRUDGQEXDDhg3Izs7uc/Av
nLX6IVuLu3fvEvutWb0m2206cuUKzMF2VEIRMJ7ycZj2uXz5cr/bz0JA0wBTLPDyGWDLxCD6
9evE3GzohxX1UqbodfrSft1DY1EAoFAG0vXrxNvzHxQPFQEBIDw8HDw+fw+R01Njc06DAYDsX
14eLjN7Xk8Hg4d0tSrOHZ4sM2IiorCoUOHsGvXLpw9e5Y0Q8/Kyur1Gi5JwLi40Gi1Wmi1Wug
0SuSsn4fS01IUfhaitLQU+efPQPHuH1H0wrNE3D6wBkUfPIFBu4NJv/81PQ6FhYXEmK7rLLes
rAxisRizz8/GuYORMHLZRN1arRaFhYW9ein0ExUVBblc/kBWBHQ6HY4d04a0jg7Kx2OPYVDK5
8/anJ2bovKahtgvPj6e8nFaCFhYWIjCwkLoNEqc+G4F9Ho9goODodfrss9sBSHYzS3eKPrqCQ
CA4fwh3Fj3EUnAO9nJKCgo6HaSYRLQ1dUVVer0eRi6bqNsUQ4WDBw/2etnjkvezSP0/J2II010
U+z9J7JOV1UXpeMxn5qZYunRpj7NxjuaDirMnwsnJCRqNBhXXS3Dn32PRfDGCDPpt2PsRmvmt
0FYqJp+aQ8eTyqqurqZ0rCQBT58+jYKCAhQUFECnUSIyMhLFxcXw9/dHcXFxtwLe3OKN5htF5
B4wOxlqtRq3b99GTU2Nxf8ucwGLi4th5LKJugsKCvo9vR8oKisroVQqiWUJFxcXyOVyyPrqq5
DL5Xj88cc18uhVqtx+fJ1SKVSqNVq7HnPifQBD17SvGdz2eP+/fs2j6nrzDw2Nhbz5s0Di8X
CW2+9RUyGHnvsMdl2LBYLh4eyM/Px42yUhi5bDQe9UGr6hyaTv1vj60iBAQbc3Ab5dTjaHj
Sfwq1Wpk7Wcho0mN6jRKbN68mfS/dm/oCpjKpcXtrLNQKpVEj9e1BzAXUKft2X19aaBQqVskZ
Yna2loUFxfDYDDgzp07MBgM2Lp1K2prazFq1KjOpReZDLvfdbQuSLHw5riH1cuU5jPzTz75BG
FhYcTM+91nn4Wvrry/Gjh2LxYsXY+HChcS2BoOBmJ1XXC+xWJfE/Xto/Gkhmq98jzz9Lppig9F
xt4wQ0FSOWCyGXq+n1H4kAWNjY6FSqaBSqaDTKPhtt9+SxmVKmZSygdW/3kjhYSEEAgEEAgGp
HK1WSxJQq9XCyGUTdatUKhQUFPRBh4GnoqICAoGAWJYols3F3bt3Uvtbi/b2d1y7do342Wg0o
rm5GUKh0EJA15cN45pnbc57NDU12Tym3s7MTWcd89/J80SUZ8WdAj5H7JuSkolm5mZK7UcSMC
YmBgqFAgqFAjgnehs3biSd12vu3sWPU/4X+19/1Gb8WnUTKpUKqampSE1NtRhvlJWVIT8/H66
urtBoNDBy2UTdC0wCchc+GNi8eX0v1z1y11D/cE37nd1zhvIx9XdmzufzUvdXR7m+nJwc8P18
xMfHo6GhgfJ+FgKazuE6jRlr16/HpUuXMHfuXkjvasTu2EDq5QDAc04gAED/+Qukv93KSIJMj
iNOweanV7VaTeob1Wo1jf2n8YQg4Xw8HCcPn0aly9ftnucP38eGzZs6NUseKhAEvDnn38mxh
o6jRLh4eFQqVR49NFHoVarsTc0iCRZY0EuDOcOomLNu6jjnyT9rSojeVkpFFOmTIFeryedX1U
qFU1AlUp1MdZRqVR0tQnDAGIhoFQqhVQqhU6jxNq1a/Hhhx+CxWJBovBgtxcB01qbUeI9EQAs
xoBV6QmQSCRED2h+eluoFCQBFQoFjFw2UbdkMUEHCGQBDxx4gTy8vKQ15cHnUaJsLAwyOVyI
g6GLac8CankxRCz1b1eTypHLpeTBjTL5TBy2UTdex15jIAjBJKA0dHRxDrap1EiJCSE1CtJpV
K0tbVRKrjrf13DdEdHbGwspF1pjFw2aRpjv3vNGAY/JAGPHz80kUgEkUgEnUYJLpcLiURChKH
qJk56PiP4rz/YjFvSDOTm5h19oHk5EokE27dvJ0IikcDIZRN1i0QiRsARAknAY8eOetNOo0S
q1atwooVK3DhwgWIRCLsXkM+BTfkP6G5QkfsTzoF8+OQk5NDGGu10gkwrlz57Bt2zbiddf1L
qq3njMMbUgCHj161Fg41mmU+Prrr7Flyxa1JRAKBRiT0ggIVhzhQ7Vp7aiUZ1D7N9Vw0zsBM
ycORO1tbUkuayFkcsM6hYIBIyAIwSSgEeOHEFOTg5ycnKg0yixcuVKCAQCtLe3QyAQYLeZgDY
nIfw4ZGV1ET2guVzWwsh1E3Xn50QgPz+frjYZVFRVVdn9galB9NQhScDDhw8jKyurM0uCRong
4GDyzZOxR7sVLvudP+LQm08g853fFqk1GcjMzCQWnrte/vHx8QGLxSJeG7lsou6srCxGQHR2C
```

MXFxZQeYai6WQmdRt1jCD0vQK/Xo7i4GEePHqX77QHoImBUVBRx2UenUSIoKAiZmZnYvn074u  
Liur2stGrBGwh8yrmxa7geDpk998ypeksr0zkmZSbrklJmZ2e9bvYc6+/bts7h+boqoqCj  
S66qbN1C+/CkyVrkQUb/nI9Jrwyox1K5yQX19PbHf999/T/fbtBQwiyMDGRkZ0GmUCAwMRGBg  
IIKCgqDX65Genk5EWFgYIiIiwjk1DidWv4CM7yeBv30i2kXTwfF0wKuubGLbmTNnIjQ01LR/e  
no6MjmZ4evri/T0dBi5bKLujIyMES9gRkYGlEo11Eo1Hn74YTz00EN45JFHMGNsJLi4uODhhx  
/G5MmToVQqIc3Nsrh+3F6ls3pdubW11Sg3PT2d7rdJFvDgwYNIS0tDWloadBolti3/B+bPnw8  
Wi4WvvvqKdKE6NDQUC19zxF6/Zxe2/2ksmuaCjT6z8c1HT6M+bRp8pjnBaDSCz+cjODgY8fHx  
pP3T09PB4XCI10Yum6g7LS0NMpmMrjYZFJgvyo8aNQosFgvjxo2zeLApLy/P+pN1v2itCtjs0  
kKUKxAI6H6blgKahNBplDgXPAMcDocYZ3S9SP7NF7MR+LfnkHDOP9Bqtbh58yZCFr6BU6GuCF  
8wFsl1HdqC8vJx4eMW0H5/Ph6+vL/h8PjgcDvatC4SRyyYJotIFPH780DFBc3V1xdSpU5Gbmwu  
RSAShUEj8KxAIrArYXbS0tBD17tu3j+63SRYwPj6ekESnUclIZWPv1o3gcDjYtm0bL126ZDOS  
k+Kx1MsRzQIveLs7gsfjWWzD4XB1/5oax1zuofRQ0oOgtbXVYsjsSXVxOvUBRwHEQCATEf1Sva  
j1ISAI2NTURkuTwecSBnwvyQqTfx/D19e0xOBwOfGa/hD1+fwYkM7DlczaWvDe12+33B7xLai  
BT3SkpKWhtbaWrTQYNLS0tOHLkCAICAUwap06dGhTyAV0EBIDt27eDx+OBx+NRelwQA0433kP  
sj+uwdMbT2B/YKR8kM9Ai8IK3uw0l+9gyMzPB4/Fw8uRJ1NFx9/6dMAXJLATsDaJL8eB+MgW+  
Xk7YH/BnGC57EPKZYtX7T0KWcc5ex8swzOizgP/+0A2h855GUcwUtAmnQ3tyCla//yR8PR2xw  
+cZdIg7Bbx93h1Lz4615zEzDCP6JKDh1yp4uzsg5MOns01TFwT/bQwC/zYeGnE60trbEb54Jo  
79+31AMgMdkhngeDrC80vgufzDMHjocw94v6kBFcUF0MkFuH2j1DToa21phre7A3EaVhx+BCh  
vTej3wVZVVZHhx4zEKCSR1YTT6NAC05uMEF3AWvobW183G8ZW+yUc1zJyT08XBAU4Oxz+Uf  
P36cSOkxkuP69euQy+WUH1AfCthNQG93ByRumICzzwAAme2rMSPufDcwMT1E7A1cF6fy06Ki  
iKSGpmeT6mqquox+dFwD51MhpawFnt9fLRhVwE7xJ09xb2hGhXXNFj996cIAduE0+Ht4dinsh  
UKBZGox5TYsb29fUBSBQ/mKCrsr9fHRxv9EvDM3o24eGIXgN8FzNr1MtYu8kJDfs38zjqRlmQ  
OBD2Hgxx9SWXsDfPBslnsHuvpeutRXV0dKXvrSI2hkkW2J/oloLe7A1a//yR2r/kCSzyd0Sqc  
DkhwH+WE07v2QCOpyNJwBaBF3w8nIgJS+o9Oni703ROWHrg2rVrtFijES/ginf/g1vnpyLyc  
zz8vX6XrSnbE7uXPYvDweMtFqa/+4yNC9GdvezP4V8hNtQVPh4OaO/h0pD5LLDpXj0SFj2DuB  
EY5vcVQzKlbE/0S8CUI9uxP6Dz0lu7aLqfbNaiPm0aOJ5jcGCDH3w8HDrHhjZ6QPPbyc987ED  
7qY+uGMpZZLujXwI23qvHV9MdKY1nHuk7J+FixEu41+EJSGbYFPDq1atEnP7YkfhAzDow2opr  
167ZTYSYmBi7lwU1IisoiLKApq3xVBk4tkd/Z4Fmy849yU6xLYFNM+aa15gWFgY5Q96zJgxi  
IuLs4s0X375Jd5++227SdgbAYdqFtnuoF3ANuF0LPF07rE087RuJgFPnTpFSobpK/Lz8/HKK6  
/YTRpTauH+xtGjR+Hm5kZzWk5p7oY6/RKQF7MPYf0f7peAzQIvcLye7LEe87Ru5j2gPU+rQyG  
GahbZnuizgD+tW4qg2c5oEXj1S8BWCj2gevo3cwFHWgzVLLI90ScBI/0/Qo18p9AmpDbz7Sna  
RbzNwaanuJRKpVUBKyoq+vTmrTFYyzIJaN4WI1LAq7IcBL71THnZhUos9XKE4c6tbus0z5xqE  
rCoqAh+fn6UBZwyZQouXLhgczsqZU2dOpXS6Y9KWX15eTa3AX4XcChnkbgUGZQE70jqg18jg0/  
0prPtKLL6Z/zS+mf80Nn3qAs1Pk/s14OkwVxzVzKlbus3zCpr3gD4+PpQFvH37NnQ6nc3tqJR  
VU10DrVu32qUsqpgENG+LESog4c4vChrHFF+aOwan1whP/QKSuNex42kN3DuuxfhN8vKwqDs  
PcoC1qdNw713x3Vbv3lewb4KOhr0aDz//PM2t6NS1sSJE5Gbm2uXsqhiEnC4ZZG1KeCdm2VYM  
s0JhdF/tVg+iQoeD18vR1SndnkWpEaA1JN7UCiIpyxhT+NA84e0R/oYcLhlke1RwJb7TfD1eh  
J1CW+QJg0XI17Ckmk02OHjnvZ8I2Sq7/fzKD+krKApptZu2KeObW7WbC9bnEazGUNxxyyPQr  
4n+XzEb/uL4QkpXGv4asZjoj4Jxt1/Gndz2xbG7F87gu19P87IH3Hcps716CTpKCxaA/x045n  
9wKaJ7Yc6T3gcMs1260AKz94GeWJr+N+jhf2Bz4HHw8natd+82YD2pXWx4GKf4AfHwVvdwf4v  
fUMkPeWzVOWeSJLk4BcLpf4HhIqHzSxy6XUIFTKsk50hpubm13Kksv1CAkJsbmdScDh1kW2Rw  
G10iz4eDhyTQn7F/nSzxs1Jlbj8Vn6dtQci7B290BYZ/93ot6uzsg0eo/Vo/DPJG1ScDCWkJ  
cvnyZlh7Qzc0N7e3tdimrra0NEybYfmDLJOBwyyJLaRbc0vz795MdWL8MWxeP69/aX2Eg8OsF  
Q00DSGYgeeMEbF7Ehk83t+ybZ041CvhQUID8/HxaBDQYDKitrBvbWVSecjMJONyyyPZ6Ibqtr  
RXe7g6ovWKZBcFamD+YZC0asjw7e9Xf0nhYGweaz04d6WPA4ZZFtk+x4jb5zCZNTnqK9J2TsP  
WLcbifbf207f+mEy5tnQhIZiB4zhjcKrf8mk/zzKnWBCwvL0dbW5tdYrCWZRJwuGWR7bWANb/  
exFivR7SLpqM1dzpOcF/A6vefxMp3xiB3r5tVyer405C4fgLpd7VXpsH/TSfiYSZIOvPIVFkR  
0Dxzal97QcpjNmDw9oBtbW3DMotsrwWM27cRsaGuSNwwAd7uDt1+nN4uzvg1n13/GvuGCyb4  
YiUb19EXzr1Mk27aDoqkt7A95xn4Os1BtL0FATOgY/SuNd7nAmbZ041n4RMnjyZsoDV1dXIyM  
iwuR2VshobG21uQ7WspqYmcDgcm9uZvtJ2uGWR7bwAP61bipXvjMHX8yfjX10Nrpw5CG93B9x  
J9YC3uwOWzWIj4p9sLPVyhLe7A4JmOyN4zhj4z+rs7YlecUVawmHcb7wHAKi4poGPhwM2fuqC  
bxZ5Wq3TPHOqScCAGACKpqZSFjAtLQ2ffffazzze0GugeMiIiwu1DQwPRAw63LLK9FrCjvR3Z5  
04ST7E1/PQd1kxzwNLpjgh+/0VU1RVj2Qwnokerr7mDu7cquW+oRlub9dleVbke+VkXun0yLi  
kpiciacu2GVCoFNNXv2h1sp2DT1z+bekDzLLMLfkAjIZqeLs7YImnM+43dPZqYZ+613nTizb  
v86NKAgo791TF46cWbBPvMe0NQOcXFxwyI/jF1Sc3Rd0mm8Vw+05xist+ugVexQPAf17di4  
PB6ysjLR0Vg7IiMnOxs8Hg+nT5+GwWCwW9vSid1yw3S1tfm+3b9ivrw1Fc3NzSM6Wlpa7N6uP  
VFZwf1Ay39gAjIMfSZ5z8Xa7zY80DoYARms8jjfHyyJv+0N+wkjIIMFLEmnfP+zetaDr+uB18  
AwZNgbdYCQbyB6P4ARKOE3H17hSjvFCMgw0Dx36IAknwsit9+3LN7QOpmbGQg8T+CgTv9Aoy  
ADF1w+3IuWF/+dcDqYwRkIFFXVzeg9TECmtAKiYAdrTACmtAKbQLGHT1AV9UMgwhaBDx5Cc/W  
z7N+9zPDyIIWAddM+gM2v/wiHvuzDDIGXMDq6mrsmsTCrkkshC76AMu8XsLiCU+An2o7eSTD8  
GPABdy15ENCwF2TWIh8kyUi7dB/toGhbwy4gD+8/F+EfNtm9PwlhQzDnwEV8PjuHYR8EYv/Pp



htc2BpH1qMsclQkVYqJ0RI0p67JgUI+AaBZA4V1S+0xnCFL0g4p1EeiXOwyJ6UJF399MXmnZ98015nb4z9znqbHFHIF7dvVaeY+S8/b/rf1rxn1o9qf3RSBStYX8ltP+fXyc1mzWu4Zv3bM27cvVxTEHjtcW9n0RQ/ioAO3Xb+xpv4vPLHysWtBSVzNyygeNaRoRNswlD5tjIoMctqx9XtrtWY6i4//NYxNgrC/Y+/HpMneHPWwIdB104Fqk90jZlykH1JdAaEBQtJfwuuTzGpQiy0qJqy+rT4xOGlslufKuXnLrN0n/kbdu2V0t918aXNUdzGINi5kd9S0xHXpnduvvpNpspveo/67eWu7NJG668uHLoFWy5q7g01Niv1TuI4QL3sPP1N8u4SOIIyf1BvfWnzeW4bQBN2vof6R92dCpcUKNghAzDx0o2ORyyqAJC5byRY/3sxX/9//NoxNIrrA42XMMfb88eLF3qR9Wt2fpVbxgw9j1F671zeFTrUxGZX50+IdviDMyJaDgpEGNSMJGgYo5zjEQI+qYtVZj9qUa0So0/H7RbE0GNtw+JVan8x4nLfTFMhyNxktcNMYdu/c6DTn+XsO+42+SBh25Hz+9773QzHpbBPXt6h1xffffYdZ3qPrurry1U3TL40SNpUAPbb/fRN6xhLJezaIeTtGD+ZTmex4jY3PD5VCCSPHvXE8+ezuUNSV4DcrGOPUlrzQn+z2dic5ETDVuIuMwdT2wUU//NYxO4qo/I6fHsMnaAyap200ZrG3LS2x81cHRSyXJtDn1J30/WvFsVE/ZaLb5Uz89NHxu2Xi1ycdZLLeytJC6uNKLUzpfQNhbvGKqQM0UGWgtFveZCICYrc+ORD18kQ9T1ji3MKh+It0MxOqHAbM9UA/77//xtNqRSFCeEbE5PIhRwmimDfGITBUonoqYUQ082jtVqXiCOSSqJhYhSLB8aVWJDy6Zx4hKnC6TdJNJEm609Zy//NYxOoppAY6XHmHdaZ11Vpn1JV0cuYNajXTnBq/4TymPUdyac24qfxZclN10zHNuvkMyqz1FLYxZxSrSiwXVnRxhpamtv/IZVa2vsKdHN3Y/yjat5jMLnPcxxMpykwrNjrcjvurh4Lw+f7bUMby/JHvxlaWWukV+X8UQJRpf2ugADIFg1alZTVbvrLfZK7Jq4GKwEEEhAY6DmJopkoSugxQICBg41fPYg1LJKza01BkeR//NYxOot7A46X09IAWB1StHYhUGgkAgI6ZsWHHSk8HA21TVoihvZd9RkxqIQ4NGHggYxAusML15gECSC1HAQEAMKGGMdxCAhfykvy2x0QQsRv1PAcwyTCpEc2eg4uGFRCNB0C2vsPd5esjehk7tuPDMGPq3wcJzAQUDA4nWtBplRu9x4myQVKYZWe95HuAHEGmu25DyJfqblv07xoD0KxEAAj40BIC1meQi78OC96vG+ohkk//OyxN1b9BZXH5vhIHdhj4mxBtIw9DMHklDhtu8jIJwv4ho+St7AmSNbgR0mAuwZAUFU04yh7Y1Jqsehic2+1BUhyGKR04PoYzj7b1mLtMZo7s219/HwYuziHVBJE4CcnYtNqWU85Bs5TwDD0DaPw5PztPLYcea3Kpa/kThUukEMvLAkuct16laS04rA7jE6awNPlccch+H4NZGwedYJQVYKYJKY8AASEAgSxQpvcGDIOMhx/AkADA8WTBMHDEIMzpz3jVE8zccsTDwfjcxPDEEctIBkj0gPjCcfDGADDEs0Q4hTL1g+x4Eh0wN8Nc1cmDvh46GYYSGqCjJpaYaAmahrZBUDeU1xGWKFAsvyIio0QAIhcOHUK0Gm5uSFwRbRUCg4rReMMDWCCQ2Dh8BAZjZC8yEwRACQTjEwlIS7ZhyUtULCSg67AMmGUhINAkICYHZE27qUCIAbsQt/UhyQDoIRBIja2bR//OoxMRitBZ9f53ZAJUvYHBK0okoerxfL70VSvVqcdx+15v/ATC140k7C/YFdikhTwSxpEuetcat80Jrs8ZrJJNbe56mXyxrTSGdMT5DFWY1MOTLVsTzlzuT50sbX2seGGXOnTrUkKdbBwbNPcvCDU/zTruJBTyQ0/jWI3jJ4YgitE4Fd1L5qZgIKrQzV9oQ98PwFWWwpw569HTf1/nIY6/DuLLmVPs+gNsT+chUE4yuvYma9HXiENsChnb1cxOepnLIffv09Lev35utPyOWVZ6bpe26AICyj023KS1taBo4b2THzD51QuAhYw0SgbSz1yGGDxcPQUMA2YKZGIXB14QnEkEyp1GENnSCovWwjvUj0AzEqXGvRrzBQzjXLV6A12ibQNWrQq2DC11o8vbOyZVAugDimrT+uoXeodC2C0Fe/Bb5sNZbdvXHkYGnSD/wHTp7o9LDMWoMXgZI6709mHIsORG4zYpJQu+JRMK/KKWVUUpvd3Xv2K3c+7n5ZKpX3UQpZHL313J5Y7951st1EOPpKX719Pa79Sms9sW6+u3bG8tx94186takpLP4Xred//OIxNxGI/aNV9vIAbis3VoJlf1MsjGFK5E7JqaH43J1cjHbfcbe869vCx/83v88dfzDW7V2hpNVopnutIJDtzFn5uzytTkAYLrQJUAoTMW72hR1sUNpPFQjmN1TDAHCkXs1oqAJmJAUAYZCE9SVsQDxpAct231UpTAwsIBpndneQcGVMqXKorODi5i8UgvGXiaQZ13dj6BUk05XKaeUoafJrdezLGZu7qtauCgFz6ygenWb41GWrKwSB9d1ZoC400MthQR2+1PFaivX/5Rv1de6eDBCPH50kj03uof1MvPV2XtzMz1c2vZPX236sycXS/Q6cPmW36QmRnW5UMR3EXEI+hOSwVq7ztuimsze1s3P60z3/dmvWXTmfq+3zN//N4xNY1y+qmVtoZjUxV7BEAuruASM6jLbLgdZKwFEydSUbmmYJHvGwAjKRgqBkdhYI/4XZDeiDa0zsu5g2L0ltq9nHAFeEU/I7LhwZic0GLwFDkaBpA2E3297dB1L8SuUd0F0FF4vvWNp4cqW11zKIUS2roNT1/1TGeO2IjJt1mOfifxQmcEzdZdlWM+7i2f+7ZnK/1WNYKzBMVZgXp6hVCvfXJX3L2mxt1fWh83fm17mte+WwbhsqliJaK12FTk0mXRacn4bfW9/7nr+Of+5orn/NZ7HzyTt6dpVgAQXbsmkr23mGB3nLEAWMJ14yE1AZ1TRbqzgiLgo//Nox00zu86extYS1SgCChEKgEFExREHjGQvSydWTYxqDwUGYPs61TiIFTcsUkSsN1IAi/f/OWcVMw+dWnhx3p9VWLScjkR8DoogUHKyEJTC/ZToXL/PrRKctMzbc/Nk1L2rftAPEuBZPnjkdvdrvXpbuzLj78zbT3qUmmMKJDTrYokWQPLqggZcMk/9KezabMtnKJtCvT+Lw2MJNF5VGircGBkyJ5Vo0+lZ8/fcf1/27NzHipKSMm4ImbE6xKwxXLioMvlTe7zRNpAgAELgsYbCCbKxSY5AG//Nox0o0y/KSPuMNbWCwCGCgBpFGA4LCCufh+EWS1Svodf0wro7rwmNNN11LizFFZzp3LhbSVNZS4Z1InBEWzw5EneXtz3etwzEpH26osSAiEAiubqTAfHXQ8PbYauUos8HKSYSassxD5QPMeGoiIPD0HQbA2GiqxZINSTdda+tVpmWsk2GizQeGCzr5TDTiaayjulqymbyjWzrgWEYk74FjxWuCg6HqvDYNRUVq1R7pobnlvTbr4/+B1XPMh5cUsiCIR0WxIqc18MfEbhJvSCd0VAiHMQB//NoxOE1PBZ8Pu6QfEMHoM

3RQTPpHAw2KAsNDIeKhgoAGPh4ZcHQ0FEv0r3TQRmJSaZVH5MImgpjvEMgcxcLg  
ENInEKuK53znLL/3JQnIlZFKTeOXJXasdrzSw7T+71b9v4F3nlabENV3GI4iy01  
53IgdLQxEQosQxLH0XYCQ164AvRCKU1C5b8OxIJc0wLnChuhBqKjLV/GSAYzJWw  
u4mpmpWzeWRvilbBizC5moK+zeabnDY3B+2PdkOh5Mr4hyLGKyOKjNwTNV70n0L  
fnOhcr/eICsiaY//OYxNdRDBZ0HuYfGNwsnGSKr+ysQueG/vHxEyrFB Eg1vQt+/  
nfwkMdH+5IY8eCFg04SMQ9NsKPHwfROGUzCaBAxGyUKk64jANwvEh0L6uUEBrQ9  
XyL6qAdFCfJ5HAh5PwfS6iWlsuoc4igXBsj/xFw/UzzFV750zoYqgCAu73Rvds/  
IaLePEAZMZ0EFHttJGqnBFoyLckW+EYCnWGijIjGQDKAgM2cty5y1CQJGmyGPBm  
AGHvpXGTIDF8Xo3dWNxBhUJUYU1iHYSnuYlCvJ+XnjghC13zbEErn0e1JMAAgKM  
H+BCDZ+ikWoBR4HITrkQQEEAQHL0V24jVMXipXq7WgVhs3Jmh5kwDIIU5UO2BGR  
Xr2WL+bxQIzQoFBhYEhQxUGBUWDkhQgKosGFgcaQlGRAh2FMdgyIiu1qllohJa6j  
JXabv0kJrzTEot3jy7xwT9ZxmVu9LC/8thucR4fJhieTWpI27dYJY//OYx01bpB  
aNnuaxGDpWtZYkn3IWPsoa9nygRnEdp8Hdnox cicNXcZntWmt43u3Z3N+I9IpTH  
oCast9wH1gJ4WFmuADUEcsBZEuguVOMtmDgj0RGJSxbTFUzkr24rifu+zqbdOXR  
Cs0t1NPdj10HXcfemx/GIOpG4FjMYhizI5Q5VLLZXK7dPO2aa9Sat8qnM1uDb6R  
p13qczzIWpt6ImTwHD5rUANLbq1e3M2UBy4VKTFjRQGepjZ7NyvAQMEMo5MplaG  
iJ4WqPwIjWbGaoiaLjmEAY2ay2gYmhIMCHNLNNiOb3UupDAFjSH14Pa67BYkwxr  
NmtNU+VM4096VIyMCXbbcSMVPh7elu9idCts9kHjJUcvSAhZ1CmE0Ofwia9dfU  
LP8irtWvK3wETRddsNAisRLUcfuXG987/r/58//vb28zUsbRLN1E6stIdIECM8  
IEWKm1ozjTgmtLKv1Lbjv8cWg7ykn//N4xNk4I9K6/s6TKe3sJmo6EE+qlgU4oA  
BVaUc7H8pTdhwVdNGBtvbFBavaIMDmpG2iath2DcKTycnvtwBAwsU2zXSYJsAfH  
k5Q4AcAXABUgtypxCCaFiU7A4GAA2FesqlXqclY3n0BXs6scWJy3R4vp6BRZkQx  
hhK6j9+2QYuq0eSXgxn87xvVPJcmBFgtYQLSdRhB10nu5jPL3D0u1ma7JaT56Qx  
MvhOBXQtrnUoz/P/Pf/fr6/xmrynn1HJECZAumBqAVJnWa6BsQFKPaOXUbvby7v  
/uatLMHM3uCacmFIxvlcQTdYACra0vSCgt+qGLirIO1jNSB4AL//NoxOcz29K2/  
svM+ehwgK+beNv+tNgMC5alFEzqpD308Ds1h6UuKmgmVnT2xnAjGVZumTjrX6r1  
I1K1xTVAxEaXHD1cfpljhgjPaqFh2YRpW1mSTyxN2uZtEheiNJJozERAKITTce  
aAjMCRmF2tGM/VwzMyW7kqmyJmQqUDIA4gGRgbKpjwhR4+LTUUUV9/zPuvv8hsv  
67VRq21Yoe2Q1lxhEuFCqKdKXCbmzVyp00599S/9+cvvvaqr9RZ0U6qYEKDkyM7p  
Tt75x9r+DMxC2NMGC0mAzwV//NoxOiyS9q+3ssTERR8oQIBQASRzwjyRTgpUWPF  
RSggteXKe+pxzSqWDr/FQCjuJiHMFkzzrKLU6UXJUKK11BuFJVgfFwyqqSoYB  
Y1Q1dSrUWRjkB0MpsiDHSFn djZnNk5KqNIkYbXmZZK675nan9tW5J5F5pL1u3S  
Rs4r+d+sbml033Wyyv2uPDav5T6RkpIvXykkYCjTQlqolrvrHVs+t+19z7vk4BVR  
1BM1WMACBu320VSXuvVd61LuH4zGyPGOziSEvGtsyoJLUQFnMb8RqE+DPhy//NY  
x0Muu8qnFspNEf3WC1zARFmFRiREggEA0itLSqvBPJ5dJEjvMU6Waw1ALNJ6U0  
h2B11VU6PRKG/eVYisleaeWnrT1tTFqtWYk2V1s56Z6azWewyXf3H+lQenmyArX  
F56FlrW13rv/jefjqatYuiyOHEiR4ScuyKIKRIm9XsFpLWKHPMsKS3tqOzdtyq  
JBWV22Wea1nbTWxtUlMzhWzv+dt7/fnqis6kUUJPUTaGwfP//N4xM810/5+xtMN  
UTSqd3HZYAAIZfpP1E3upzfbSAxQQOrpBuRMdEUqVJvuRuBlhsY0FmXiK6TC3A3  
1bnbrzOS4BQACCjWVoI6TLwFBIj2YqOHj61lfhcAAAAPCAitLVJ/s5QfVvAn5zq  
qSeTBjQIIMwBfLLkrHdbZY1Lyw+kUqSikppXDdaWTkca4/CN7REYhrqPKE8kqYz  
wuWPrFSBBrAmFR9HMsieK0owkt23C119h9ualykq38TkgUZR8MRKE71Sx711jQJ  
iNoggTkCDelFGvOaNqTGNzbnrqhULvrzy8hkM2XzJy1i1IbPPu1CbcquWdOVvm9  
mLbGz//N4xOk/FBZ6xt5TDGWAvgMj0JFGymk1HjckB+ZBSkbSqzv+NlWNb7txfLo  
RBGZExWZSBWYAAsNCswyCAINASgJh1lvu+OAMBQ1N1s2NWidBB0CEJgAGARM7I0  
qrHfyBA4tNFB1mLtmVimFFbA4i1tS1TMCJAGJ1bVE1GqaMGIm4cmGpqxga6ZYAG  
Qpxwsmas8ApyMyWDHg0wc80krDdjwaMAqDGNCahPzfXk1UpFRIyQaYiYwf0bEi  
5a62thQAOAyxxQPmxFUvp43NNJdeG3bd1SsQALiK4YhZQnqGBA36ZxBKpc3aANX  
cjhtNdhjLJTG4LizQu5dmpu6//OYxNtXy6J0Xu7wuc5un1FJhUw10Yny/L5VD  
LX3XjcLYcypQRijc3HVXUca41i0K8GxuXK3Hg2MRSYkFmtOrQZxcf5z1WJDwNB  
TsKmT5BwHYgloTJYkFj4r/WWtpqKE9AGn3LvbIBViVxw4hDcP01V/8JZN3KSit  
Y/v6289/dypMN54ZWCEwfAXE2EgGwbtVAwAyL+wmfQPCf1/memCo6ZXArdcIFU  
gWYOR5g8LoI4FYUyHQuzuS50BiVqwsAWB2ChvDcESGAi3TJMsMKd5PuHbu4CYS6  
8Z31uLXKT/zZCv2R/2gMu0KLw0XBglNvoCmpk1iyC0AcyaAiQNPc0YxwEt0Z  
UyY86aSAb4gqESCBwQwSYQ1UKpbBLYxARga8YEbkwIVutpOFFC3C9KHyOCEhoOc  
0myACJDS21EtRQSPga3G4MYfalef3N9sf3OpYvXL+Uftv5mlpvzrbo4dyjFWvSW  
pr//OIxNZNa9qNvuawvTrVMK+wHa+dznJ7u+1L169UmY1HKaRRmGWYUPFndf91r  
N8WWQ1T06Pb1LXQkDUTyVgmQWa19gTF1utaVkJZDj4OY8Tt3I04krszfcC7FB/a  
SvUqd/dJnfv/Xyv0dGu2osBwJrAQagu83J+62ALTYK+1rNgiFOLEYKBnpk0TXIg  
mM+F1XN7jcLmmIDiUEPwlyHxBgahfYnnAh0ChgsESvCqmE2LxvdMolV/+x80rV/  
bpv66Us+a0N0txYGRvOUfR1iSETzpGJRNbPXDC9b1RWGwq1eWILgfyOioXr6SSP

L46jq5yy2WqXMpGK6uoTd+WqmquKsnTkeISABw8YIzGRMJCDV0CBLYTtGj9fwr3  
/x/15TpA//OIxLM3O+KZvtvTNXCMerlclZXCiKnewSEaYeQNumy1CWXC9qve/Pv  
acl3SQaix8Zxd0B+nQUATKEp70CEpPCpLKO+6RBHNkmUPdxt3nQJA7xFKdlac5g  
EZlxEtnf1IzAhb5RFsKzKh0ELF6sUoWFLAhzFj0btTdKw2R49+28Ebr5Z1neg7D  
/Vk8/s6QQ8qWC6S2XEhv3zkRI1/4xdu++idG6mtde3EJhzZKFiodPh4ChoQtqT  
QoVo7ONLsVJpqshjwkiVmWtpQKU8I3dQ9I0v7bP697jTPS12X7bTh8NJLUbME4W  
eosUjj8sW0lp3Zsz+81F5Q7HfqnC5paoAIiZY7DLUmg+zJYcUvMSAs8YWawaJVs  
mX0uQxSFYzLn11//NoxOkxi9qq/tJNcEtoCC125Vi/zRQAxAIoW9FFBpWhORSZf  
e18SEICEhHK5I/r1KmLVN/cv/ElbrdxGt+k+z/77pEIX75FjTHyioIsVvVIapoX  
IpyqcEREGnI1U5aotdLEWUs0hZivVNDI4TF4IhCKk92KzWxlHy2McbPO3LJUByw  
HJSIhs7JY0zMIZNJtuvX348s0s3Op8VZYTZSSVQcScThejNE1iitWYZo/OhztQp  
WbLwvFRcrVADLq3ZASTLNryuVghYA0wZxLDKzRHMKUBwHAoGAM//NoxO0zi9KV3  
uJNcAFDQApghgQmBwKiGCjs0MVdQNAIFPTZWR9po9WbkLPs6hDMoPpHSVFVrfnW  
FCsXokEjh8cBIi5NfzuNyUnft5XzhfRfEth4D4kqrLYtJh2Lihptrfff/KJvyq1  
EMTNjECWCpOJZnRMJIJix2c2HcdbNKEova3hzq///9t+rSJRSVvSeHiCWuxpq  
PwfD5geHunxotbCz0WnbZV+pajdtH0Z0sUN2sNWmw7jQ8cK1FDFeTYnUTji9Qum  
xWnGzlj5zRPP27TUXzpJQq3//NoxOk5o+pxvPZWmdEDah4BJN0EgMGAqAyBQWAo  
LmYP8DRiMgDmBYAkAQFjAzArMIoAkW6g5DFBAgFgBBCACpqnKCAJTBiAJSt1TAZ  
M6YUAJ177u7c+DYA+3jXfgSAHShewt83S9b3qFOoVfNjHen8tYzfMpKXuaTPz9V  
O9bgwFdf69muuv/h9jevOic9T4irggwfra+spqHMyNd7RbS22aQoiD7V5R+v5n6  
4//qf1EkFo+UeYH4NR2EwNhGO2Gh6KzxZXffbr381STOPhTaQUYc13Ampoe//N4  
xM058/ZgfPPRNAYeNx0RRWHRgAogtU0BTdy7SRMNuexth9lQajV2ntgSAPATp  
viEawwMgdDAyAcMOoi42JG4zAeASMG0B0wQAAcGh4wpQEzDBHgMGcCIOAYCJAwJ  
EYwQhFWxp2WpK30owQi0XfjrgNYcFesG26aVslMhFjikupW5t2Zw78a1UjEsrz  
9i3nMXK17Hsvdan3VziYOoV4MwZJch4F1nZ+/pMypazOCRsSpCMgBYKo3CZZIMn  
sNROYaqm1Wz9+ewU2c724Zd37vf9rYdEmwrBChyKQmbevFYTeMYfz1P+f9+CB2e  
Py4ZKDp5HKvcuesqM//N4xNQ8+/Zd3PZSnR2/8e880s2tAZRtrJo2qVfqjE16YR  
iiMyjliRzeZMv0A4WvGByFO+Q4BKYJYDwQDYYIghBrJ1bGFWASYEQFhhJAvmA  
eYGwG5gphIAoE4mADW4m+osiYYCoAUqtr+KS9bUDO5Dz7Kdpords1609F0A1pls  
PMsVXMAMBRnLNEinUiap1wRGIiskgRYxu6tquLJaLyRgtVjSa8iQgByVWkaWxWa  
nZmj1rWzla0j2NcfJMurmqkp6G9pteuKFxVgMjQczdgncZMXzY5PIaOfcyQzNN  
czgUmDR6ZiHJQaRGBBHMRDw8TJAkLY/vvI7tJD//OYxM9SJBZgnPMxdK+83TuxG  
L1eWS124HtVoQ8bYEU0Ty+bClqKrraBAAMxL9j6pGCNbX+6CjqSbdAAJNSZYGpv  
EF5tDXO39HD6GBZwuHFxCL1wA0ta9i6BdwtQGeBqjW2jc05zCMDDN+RqZtWKqPk  
k6HyTSNTAcxTRU6fgKI0d84i79uG6ACJGePYxG1RBUGCAIx dyOBvjIos4xVMcBw  
aAGGgQ4AoUuFCo9Rx2eiNL1oSylsXnrk+eVWnmZfU1td+3c1jk9Nhb1VidMKAuE  
SEJoQkhWMITMiNqJGSqKIVGFQ5MTLsrakknVS3OnUaQbJRHP/9+V7rZ3Gslir1  
pykhzinLW0vrVsRdtkTeT1txM91C9Ekkc0YQClwESw7YxtSqXS2k10UD/GMWI70  
tVnYmmY3NTaG22hyXjsMgTWS/L61YOOCAKvd1AACSuBxkKhiEJGwpIBVBS4Be8t  
6DBwgEGCCIM12x//OIxOFmhBzP2tp1WKBDQFyQwoIiAwGW2YAikmqsmCgQNMWAM  
gdM2RMM6MaNMeHNXHFwx6IxhfoJjGUaHROmh3jx4zbkLQjSMDCRzDiQ54SJjEEC  
MYgCIDoOBpD10a7Y1WGb6M6V0qiUzzGULiyqZUsEr00JvozzoQyMj2FsT7dIYsI  
81M9Vu2B+4uSheBmTCYDrIiwwDailBcjkG12iM22dxAQi7iNRVRervGpt4rk6Xn  
VY/9zGM7r8ue3bb11faclrhFhi0521S8Panzy/PO7qSc5syWIRtIdwhA2DIjIBF  
hAoQNLEi+dakrQ12a+Rymmfqeg1skSxfB43dd+4o49jWUqGaprsLc81AF+xYSmq  
mo15Ip3iIOgJGSAVEBCs//OIxMJH1BZueHep1PLShAwaOYFwCgiNCQUes9RQJgYc  
EBRADAE1E61YTIC0EpjDIwJMaVG1ZhSBhRwqDMEVMuJLNmbiGkHvoYxsZN2apeA  
mQgImzIgR4XWMmNAAZKMEAzbml6JuqUqxiOsQEWZ2eH+tUAOK/GbWFW1+y2c91  
S2wz/chcJU+dJ3G0xSnK/j9TMy6bmOSCP1oiU3ARyqbpY1oFHudgjsctoje8ew8  
tTeko8WRUubffJUhx5skStxToFILzCSFata tP7v9+zU0UX0JxOgMxZWVDLOKAtp  
caxBUdm7Ft1bla22aaSgWXLN107C6/+tr7+UspbOdaflVSmuU0iXhNwS+LLHYa  
nOMSRzdFAC/bWUNVgJQtxNMusX//OIxLBhBZ7HHmzkIltsaFg1DV0KnZMosowr  
cquvMWQT5Yg11KnrVgX4QgNaUsWQisLPkACD1GQABAkBeGxik5ZRUUwqW1FmTiN  
AlgKAAQ41GIghIK2yxfQksx1960IlnmnR/WYAhno80kqa2BqQAfBJGXCghvEorV  
Jisdx5gLzz11wiREFmvLYz1DRk40Ki5+TdXR91f7KGjdsmWwxFdUy4mjheDYX6  
RzaWSXRT0+p+bIPCsc2drs1yuKYlmYRKnKyKV2mefNS80QW8NfzLPwqBxCN9bD/  
IecruWPcsed1et51sK0xPYy7CXwTIG1rsd1+p+O0qzSVsdfWCm7xSXNdxnWssGZ  
BSK6X+7T83Fq8geFRZzHaWK8rtI/LGgc//OIxMI7jBaDHGGxkLbMfSGFTjZUjEw  
CQB1WNZBx0B61JKIHIaz1FWkv6vtdjbpgPDTt42Jc7R1rVaRFdoian/ayAISOsw  
UufhKDRIEfpCC8NRmluSD50QWA1Y+EEspJctCqb4kq7hwjyYrrt05IasvHCLhi7  
h7knhtER73jLLKrFSwQWZ5Fhqx6TSBZzoJsa6VK2kiiJ7Yqzboy5Q3WpOipos1



Mr3jdHgv2N9eAnZXu5oEK2MtqQFk0FBzGEIKTssXmS2s20mxSGk0oAdEJBzkaj  
SdK1qC2jnrMNKwmVfpU/Nqov7zHW603005JWY5nJA9b9KdTOlfgaOZ0ofaQM0oM  
tHKvrcyESMQow+OpHXyiHFOWOLcwqH5V9DMkUZqczqoAA4iJmp/0lcTvP9aYnQt  
7Xbd+gcEnRAjsbEgI4oWhMAI1Bh6I//NYxNsts/ZKfHmHdcwQmBVeOGS8wAmUh  
ANNTPcto6A5JBCURcr/mEJos/Bb3sAaZMzcQh+IyutXmLveUcANMjdaNxe47Fmi  
o8ZZKV3o5DGThPuXG8aUkWj/IpBEIOk8PwxPxlobgJGIGMjh6tC0jxIMZBAIZE  
WwFptK1SPKjwEABQpXIICdwvAyAt4CoAA5kBrAtSRBmAAdamYC/iSDgIIGga4X5f  
203x6yxEEaGY30vEQ//OIxMxII65THsvT6cgv1cWyKhb67G/tiArFeo30e+o7An  
LTKx5fcVnjquLEVpzv3I0D00cvURWk1D3hcC4FtkA4uMMQgKGFGNtzisrd+oLr  
31L9/V4R0SRDiHnsCefmPowBjd4d3/rkbejLS4dfZqixDe122DCMEAQo6GoaxU1  
MagBQhONTksy1Y8gQgJioVCKvtazk3BdCjqQadbZGKRxUkPuS4D+RGAmSXJylpr  
GpNJIRBs68mc0vtwpYz9cU468C5NcUAqPlOTqxJZDj6Vm6xt74szxTS4z91cAv3  
Dj3Q0j01JvyAJlr2MYBADfDIZMUBS3WaEYqZCsFgAcWA1BQFZZIkcrBa041TxFD  
EjAIFFybZqZbsuSrFCE6FYH//OYxL5TjbzjhTZfHP1WPAW4RYmlwtQiTOAcIuFx  
GjENYC+wwa5LzTDMBAMBCFSTS40iONHtxOG8TAdDOpi2M89IUCPGTigUiTS50J1  
c/gE0aXlm0/TCJqN818UTdEMifkAOgcCdQpRkoQxWo5XYUPpZkkTJx0tk538KG  
rKME1Hj2U8IL1m09pgKxRsji4saYZICzRvfxrMkRka3dwABJGij/ZAIVBRTozbd  
4ETC+5oYpqxy0LY267LFqFlG+gpxNqUKGBQMwF7WUx1T1rAqYInjEETQCCXQloy  
YEgcTEy/C93gQMGRSKrO24KFpiPowCBYb2/+St6SiUD2PFCX4ZEYIApe0QuRCof  
Y2rp6u2FZHRvbo/T1Ux0ieDhEXYGwt6rn+c4WQ9kmXY10JRRuSn0QE3VMO0T5ui  
QXJcf+E0FFJ6J0lU9AcinRUp5MyoMhGm9PZWud1zHczdq+EdrmHZIIBgQBj52/  
/OIxMpKbBZyftPZjGZeHlShGzf2X+YdYJK66eL3oMjbgibjiqtwdVqDF70LmXLk  
LxWDM1GpeYLh+8hnjg5ODyP7yt43LK6CjLShuc8F73TguHw9KFjho1UMdhUgAAA  
UAEEK6dP0puwoaYd9Ipa9nLd6wAHFgdjgVBTFQkz8OMq2TI/UyEPN9VDKwcuum  
SFEACHxkogLMY1M55ShxMBSeScKgMiVVAJAaCwWB11LNfQAgTK0oqsoXNxQIks  
EUpsTjmNNXIQskKJE0tNacVRUKjXll2qiltLbKkWJLalqyqEoJqTihkKgDIC4wT  
2ITKcDh1G8hMXDoJrs05PTsbXLkbcZKuQvJ+sjahK83c8Hy/33kN3GanpEnb4kz  
EmopC//OIxLM1g9aGXN4SaWF2mRKcTs5FeMGczxqFQlcJ3/Xvy7p6k3CtRiyBh5  
HHoCaNAU/QABQKStoGAKMF0B0SADMBwM0xXaIzAQC/MCgGswKgizBcBGBQYBgGA  
CGBOR0TDii4o0gclAAoGIBN0QGR94qOUR9SFnucpzX3J8M83+terYYidHzg1YR  
PCQW879Cx1Pif3X7rDDvPz0/FXefe7339bvug/eFSkhizeze5QsTruw5zOHV17  
+MCACBIkcflpax3KLwJ1wAsRShTS+sI66tiC610TCouOE5K411sDQ1GoAFA98LQ  
HsxuBY7xoBlyqpNeWUROFCBcawDYHNEbRxEXTGYiUUDJHEttPKneahVQUduRCHH  
zoIeclvI1g9//OIxPBrc/5UePawhbQ7g6X11hHSYmtOER2B1yRdnaczI0q1trBz  
DDSKzD0h0PJa9yt1VtJVTtXbi4zsZkIhyM3JNhXvx9V6a1u+/3Gmtff/OkrfTw7  
WG8tavdys3v3c8vqSAGaPwAAREAVEW0gEBEwBwDjb/DvMDybcMXrMjAAowKgjDB  
fa9BQKAEB9MY1BuW3AJguLGJhIs1GHg5kJ6f0zmKgr0MzafTr7M4E1hlqP66bXC  
7ICQ5Q/7K3LYuYemGFBdd3fh9mECGPkqOeXJ2GxCCEkjisyGJRICVRHAvQu9H9y  
0TzRXAAZwm2qlyomAmI5j/xpYQEKHaeCh5GzuBkbDAzP2EBXioKn6G6dZmnGsI/  
KKaxy8IyDehAUyEwI//OoxL1cm/JYnPby1SE1loAV4Tfca045U3dMkzkQx5Qp1L  
gwIrcg1jedv9XeVWDC1yPG7z/wh4IWgUUGgBCAqFO0LjgLhORQvdjbK1Bype9Dm  
1mTv9GRoJRiLvpDG6Jpr1vttnhHG6Njp7j9wuXxdFR2i277RGaMUSHV82JXjX39S  
7aY3jztZjk5i/8gbJ00yw5p6gEhnIrGoq7MD2Z9/Z29TUU7RUs3VrUne4VLlevn  
Yt9p5Zc1vtNRX96/HG9aFeLFVgAGePkAAa4pGzBiUHGCYbfkBnRY5mAANAEEDC  
00wEDhgKCJ1ca5lmFYABRKUebQFAAfwdMcA1DBfZR+q06JEs6b/4w1L540G9j8c  
su8MK2HSIIWxaWPhDZIHBR9+s6B/FhyE8ZwIyHVhmbdgUOHhhdYmprhYiacB7kw  
Gct9enmgEBwClRYGX4sRQGBDJHx5+OAmnuAvpz0xAxGrCp+qw1g4IJssdxt7MpQ  
nAIs40mUP2xFE1LiFxqzU10MwBPY3u6J/o3fpd0td1LkPZA2cubog8/rGwuRV1  
K01gVGvvYTUXgxU11/5fL+0Md1//OIx01LQ651PO6ZPf1b3K+zT+Vbr0N1KcuOu  
pj0iGjp08gbMydqGKEEsr10doDF/ll1avM6/FOxWz8rS8701y327/56NxkjFGwo  
7R0AAUWHW6AACni9qdYm4gyCDNCeOgjjgHCVTAcDaK5aoCLYzeAMVXEGQjH15CM  
ZA4hoRmMYXJQDsCHfQyeHprU1FEYTozusth8bqMx02Es289iJuPBRmHQJD6736j  
QWUBhcUznfsVX/U4+nmpZ0t0wG1wmvhpaTf2d1bPXBLE9qm+emmW3rGVuZK5Eu  
vbR2kkYcXSQ7n1z6Lv/a72+9Zu6DY1NqSajmhnxah4dxnNuiTi7OnuNT1K5sSiH  
MkUVuSVbXboLjijnsipHDtuavuqbb/+F//N4xNM7A/KKfuZW3BFm79f11SmgzXe  
gkPhocWambm9sZG45VBkgAYKTVwxu3vPTR1Hp1QaDBh9NRhGIAQBrNC6pctYhga  
MxgkBBguFaRCgtPFauDBa5m87Sym8ugvVPZw+dbERAFN16SIIBzAIJSgI2uNac2  
rD4jAdxaKU0E8z4stKza9eNatKGBd7qWzRv1qNSAkN2+PDTv/3+zW+aMr87fhRv  
GNrKOa6mzDu18f+udZ//dXn/7N3eK0/oVf+Jku0gJxtONTgusEopImrXbqdLoh1  
m1YU845X3PEzN5f6UJx3PT9ueNnZxx1uaZjse8P3DxTtGxG4LiwlY//N4xNY4m/  
KOXuvTbb24q8QpahEvE/ApkwpgABholm3yuu/IgnBjC9Q+OAQwDeAVEFr06ejFo

BDAORHgxCBarT4Q3EBB8iIqQaxInc4VAVRV6mNPUVUkdWA5fk6BgIJNtSUFvKIC  
wEntVM+5OjY3DxOrA0GSPHc7pwrDyvjWGF/earthF/+lfjXvKcWsni1Tr4IKLFj  
y3a1Vq+/h//831//7f6+KPN0pXL1rf4k10+d0RttEuxnZuaLBhNsCQzGtAJ2N2  
z7jP2Zft9mEH7Y8BBxnLSLE1WnfKELvdoxRLt4kSh3vuLDXvggGI3bQgRgPgTVg  
AGWNhv8V5t2//NoxOI2G+qfHuPNdT2DtztAOAoOGAAkpb6No7KSY2MAuHByAgGL  
zpsNPGAJb8DEAdhDMCwZTzhwoII+xmMw7JgMJhG8whDEwlAUwKjkAbu+rWVju+  
CElW7n6mFtY AeLsxrcrrNFG13AfG1C4oSADyC7Hba/G1dgRwBaTL/vqtdVQAEJW  
S1r8QuuAmI7mc/w1vWvXw1qf5iSnWg1XePaGaaXxjV2xQR7rh1VY7ArLd/DhEoQ  
L9gmeKouBK8K8TxGRDnmV8NqbGgSdP6WaS3Y2WLh/h+3xYm//OIxNRFq+aifu5f  
EHNWqE4xZL+re/pTGZUP8CjdMW9Hw9bhZXKqoSbDZROK19RjaX7A4xPSBtgeTxn  
vuJberWq/x7Unhx91vqFWfnCIm1JEABsluI+rldve6zTq9ZWFAAYrFw8qGnw2vi  
CoLEQjccwEDTBByrAwQo2wGEGLiarwzbNQsKjvh0MOCKwADguAA4DtJGQwGBT0n8  
a01uleYolz/TNLQ6IQA82u7s7VUFoxPxG1z1oxHsp2ULBxV+pfDL/NKDAK/EM0  
sMS201zfiz3BcXLcXxxsseu8u7FL3jnnaUXBro5VmSSZ1khKW5QJWzLit+z+o3al  
hVLC5J53HYngjFsssL8WVZXSbzYSYnPMr5k5pN3Db1TapK41JqT3V//OIxNA9e8  
KvHuPTqUsRkBEu+Yam0kqtM9F660Drk47DSP9TpzVufqHRPupZbx8+nvtLQAHAA  
WOiQ1JXWkMEQCpuBRiZpq5kgYiwPW2hVR0BgwZM2ATiZDbQ43AFbUlqfuw4voHC  
5Y//qJCTX0Mm5DYFoVY8FzPLNCVZrWssadMKxTT2uV5Rfy/LC006ikrUw8jp+oa  
KjtZK+WfkfmFt2E4cTa16cUCuTYToPD0SFhQ2CxLI/34XM+N+IhZ7Ns4lsclabH  
iJPFlxLCVykVQRj0ST5pra0ijOFs3srSav27ULq8o1HET8ipBbdELDSHJw6NOEG  
6InKPhtrReeW18dg8TUoAMDbdoAlq0c+7MjAPAJU2MACJkxAkNTIPAlBw//No  
x000K96afuzSnB4YCABDgDgVgYAUwDACzB5C3ME4AMqJmEgDmtquiZm8dq046cY  
mLKJ1LYagGTRougxGTuwyqgHTDJR7My6mjwbRoy/jxt5JkwJPXvucp5Blnjcj7B  
bwBQakQBKLWS1EbY42we7nSnis9FZRYeR+m6KioEI61lopEp1thUmpHpvitv/Fz  
X+3/p2d03Wdoj7m2btHxU6fRPNGt6+ykbj54vf1bm1Vt1e+VHF744s6WOOvnLH+  
V2H10iy2TJOD0Q7XMUJpJc+rVXsdOH6K//N4x0c5o+J5vvZwnAAhOGTtg1JRqcu  
hxYJAYYggQaDBQeXjqYzAcAgUMDxpMDABIQbMSD3MeQnMCgIWmn3NPSFQLxa612  
3Kq5hcCAKAKO4uk3GFCEB2IbjSj7s15wcE0PTtq1pYAOCGpWlNucFQBnL/MfXhq  
ixdi1YPUD6wPMj2pcqss4sv070u9v83GO3xRPQLBZSFZf0JH1v69nbVgfcdLFqZ  
FMx9+zSlfnf//42k8aCcHkJLGEAYRJ7ckkWdv8vbduzRUs3u1d21Aq8QeIBGokz  
Uhc1y8oqZw1vbVtJFVFATIs9rAijL909nszTSAAccShn/u6bdod//Nox0847A  
J13usNctPozyBEJQrFgOhnHoLAuUQO3pNjhBgdhMwEboi+5iKKNHbeKnkTK1tH  
KiMCJCQ1mCsBCCmmj4OC2rVsXuACHSGUkjb4uhJn3JC4FDkZfuYq1mRwZ005uaN  
GDFzkLlignsldy+GiK0qni8f452qXW7aQL0nvJ+RRps9FPIkM4qEJ5ukyW2mPcq  
PxT3kQQCJuYDoNDh+s+muPCz3vY8ebOHL1F7aqXpwTKafXcrzNsswWe99SU8v5s  
/UX3JvEu25KXiOzWpqLsu/9Qu//N4xNY4/BaPHubWFH/UkWuu4K1q53Gi/f2oK  
r9hItxcdxhCvoCEALGbl6G1pMGEOlpVGFQWgoHyEDDIhTjHMkkbDAIATCsBqUDZ  
AABmy1xEWgDCI8AxcUAAiGDeh5MdTRfr/QqqjbdHmXsv9FF/hUDNGJrqALNLbt  
u+Q4MGpVpk5wakEkUuL1JkoyZ0XG9yY1PmiIAoBoPCxIZKKGeFQQnoyA4QCgkY8  
FDwqy6PxZ2GdzyICFkwuyMOxBKKFShh5kVhoQ21VxbnogBrc08ICoDoVES7Gt1s  
h/Vb5hPadrc4RoNlob+8BIuDe7b2M2R1ul2oyxq8dhiqqVS//OIxOPi8Z0Xu7e  
2Z00PKA/Fh4mVpEIBRUMuz9kxbyK5ppmYi2MLe80dsJAgU4gUAo1Ph8qFYe5Yzn  
P9HRU+TtH7YdkSi3NuEdFd3Y36kcIud/vJKf7+P/feIkKTN8wM1e9USzHgQ2fDV  
VQMOBw9RKXyOpL2dMzBqEMVYqFGxs9QNShpEdMihWdVrAoEY/KRUGGBCoIyjqmV  
F2gNzH1LAKUnq10qrrXryinuQ2MJs1p//t10Jxq81bqUxhhBAUWmnedp8DMNCCV  
MofkMDQCcBZayJF+guISujaZiKiSzgjxdBcxiaO27DV6DDCVozUn8MsW7Q6+kYp  
XsUNFh1Iyiw/8DrYF13fjUMSivATQalHfgSxq0ieaWFGxs9pI0eBW//OIxLVFK9  
qVvuzfGR2Ulkq5NrnenyzjK1UjvnKBNePAhP94xRuvrFYPiMVYzz+1Yz9Ltyygy  
Go5av12tzHrdGMcxQ9DwMsYJ1syvsbjYcDyBdqhWkmzJA81M39Mavi1HCH3je  
0L0NJSJYSmABQlvYQAS8zaWy0OsiAgOcfmjAsndNjTA1FTMap/S1jzhQAf12Da  
RJ0off6cWDEIEdNiQTcP9hgyA0YJykfxvRULh1ZzsZfQU7mJxV9YXI+XthVjkz2  
5Q473jQbbNZmbHchkbCwAXJgxyqYKgbNpJdlhNRw6pa0BTqGLL/GJi9i4iPYxC8  
OdbQjCJrEiMkFXk/vX00wJr199xGakvg6aqShE4XCZ5tLEAeHBI5eLynu6t//O  
xLM7086WxtvTqRvqG+vPb1/CVLTWWVSVVWXIRA2ywKzoAbJUgOIAuiQCx0zMdEF  
GnXGZra/qH+7KDts1VJoGgS4ui2FoAxCX8gABkv3KoOaoqwwsaPOrygzVZFWlsP  
MCKjKBF+Fb0FWVNgBBGLDsdNNA0vmDFCAFPsGMNmouQBBgAvAkif76xIKjQ9GZ2  
NX15gUEfqjdmKGODf5JYvXD1/9wEnXdYsiLP5nsnpXh4FypWK5sirpfMLLeqZvq  
22Bmh0hSsaIV0Z7EuUC1cFUyraQBkCtaKTC49CUCgUNSjdU3GW/G6xCxLEaNoy  
cTayD9rs65RqEGv6+z/uZjw+9s+hi0dUXQBpvzMF4IYxi2szjNZOZh+XKam+rul  
pW//N4xNk4a9aWxtvTUCu6DHePYJPO2hQACjRVrpItWd89Ps35ICAwAHJ2E3Vfc  
7Z9BwYHDeU4bMs0iayI5+a/II1DUFpsCTWWM2motgkshtF521s0g4gXeyWEPM7g

7c0JJsccMGuxnLncIR/2sB5/qXYJnKmbWERM1NRFoia+103XCukQHtryXJUMMK9  
czUiPKsaIiYLG5E4AWoy1NXN/j1tjH+4x9xisiVvF59VCZxys9kSzt13vzTqXk7  
ypeNwi1kS2q0hVi6qFSKeJSSXMoXdpD0ux6JqlPezZ5WbfJYLTjr61Jve4nuoQM  
TP9ojZ08v1I6ACr2/PpojME//NoxOY0k+6XHuYSmULmerKh4OEMwOQoBDKmqIQI  
THX0uQDDTGr8CP9VLzJCKkZdZv2VLrWPMqG+HAqzBzph+rA8Ctmt111Tqmz/LLg  
/ObuRNQDVnQPSYJyKls3BrU21BGo60ybvo2QYgtz0uqBGantbTNJn5MUpN6Y0VW  
LjbrW4b9db1VqTZibPKD4scNBQDwfzUkCGAkPFjnB8Wua7MqV5ZF2ZoFnXh719E  
JNK0Y8Wu79JQ62FJWL8xm1YHKbFwd204X9qAx/JAiNAJusGAIGByAGBgcDA//No  
xN4y0855vOrRbYRUTqDTWAQrRglAYjwTpgvgXmCoB0Yn4vwKIBMCUAMGABSprwj  
AyIgg0UodpqWV1UAFirInek0vaXDmP5900AGpmYVPELS20aXmcqwqynmyNdppxz  
/7zuhust8RYaJe3mvqAdLL9fr0b6/wrYtL6Xjxv0WEw0CBi0tqueKJuKFoq/+VP  
96tjea/2X///8//uv5YTWTbRgUAJAiqjadNyAD0XG02VrHenPedbD7e2r43R0+m  
XtbTTBqx7SascSPygSTU6+mJdrG6aQ8m//N4xN0629pcevPXUaZ1aZKi2nzRpsF  
gEabU1QWGjyARIIOASStBIDASASYCgMRg1DCm6ILoYaAKYgAQFgUDBFAYBwBjhA  
DGmBkAmHAFJWtzW+osLAZXZyFPnJRIBSGYHYjuJKisrpccpmWwaGAFTIAANMkoGF  
w6ghEvTm6gd2EGLbBIVLyZtcLTmwq8VNQH4rm4f/crKxthRqMA4KoAmqHaAtnrR  
in/0glr1dSh992Hv42Xvam387ovZEiQP2h7IgGPMuQJTir95/s+GxVzFMZqfQ7  
S71WM95874860pU83Kd7jlgkgM4eTOLMU2J8EQSIECZCGQc8PBIZ//NoxOA3RA  
pknvJNLRo9CqaIsIMHxgAwOm0+HFlamEoYGFAmgkCQsERkKJhhQCxieBAjAYOA  
cBAK+g8AIcB1S2u13GeK7iqQ0Dt2Zmwx7piVyuPIMyqVVYZbSELjkV1+n8X270c  
7DNiG1YapPZW8NRURmBcwOQS5hVU0EhehvPpXH1k3q1S+WaKp9rRmtbKiqF5bzc  
tPrM3gb3a4iEpTqYiGY70J4lozB5Rd0eV7240pmXnj9CRHetsr1iAmMCwUy+SEi  
RXogMn8NuXG4xDrlw3D70ICjEZ//OYxM5QTBZgnOszdBSWNjW0zuFQIytNAu2lW  
YYKhyCii6qQIADgGBs3s05Xh5wGYqbsMLKKwTqt6D80wNvqx4X1SLQS8Tof13i7  
cGNzV3BsthfAvYkw1wmu5AhFDAy66C5pz1E5uukjRuGKkQUS0MYpV11KtgRdhN9  
fzUH/tu2qAAVGvh/7XdLahxq5hAZkbR/+AO5MAa4stJFlUH2WnRmNuU/7s4TkU  
uXIraC/n+NPdn5iK0z9xRwjguRajkwRmVTct7KyBUd4jRISMyoUFVxhUO0ini2p  
JK1Uthqco0g2RQnmxKcPPwSu1pNrq0zLIvWnKTLMU97ax7WsRdTpTy93GtyOypJ  
L1IICEnxfD7VNLp2pPRR38ZRhBd12YbV48auo280MUatDMF7K3ogkQk9QWCUX1  
wAAKSuCB0ChgyEOCyYuSmCDAAKgJb0KCgiDDBgYUAQcDiwMNBq5QggEAoQBCbYA  
ER//OIxOdMHbz2fNJ3PGB1KheIAgRMRBjFh8yMfMXRDCx0xEJMtYQyeN2WDD4sw  
NUMYQDVzEy13ijYx1HIFAY6MEUTDxEDJBUKjEBYSnEFhQhBwuhLLe1810aJeP9  
XCqiuqlGfxchcV1TPXkrmsLLi/OhQTqs7UQStFLhAwjzUz1W7Yibi7ZYCE2mlP9  
8+bjo/oxJmvkt68zo/Q90CqguFdplI3jcNHrv8zE3BDe2RRzLrnO/G923/aq422  
f2F5NtKr+fndexuk7Se+s9N93M2b1xpbdinlpUp2E0sYw9zy+2ph1LWK1tj55D  
LyapSL5qZ4FygcQKDEGZDIy21L1estaY/TEqZb6qo6AiELFpipqIkX1AFCU+U6G  
UrEWerAk//OIxM1BpBZ6enszXIJEL4Z26oCByaYA6eoJDJhwKEDQFDwQGDi1AzJ  
iM4OYAjRgvmomEJF9TZFCzycwCHQSMXRNbpdqN1cf1091hFhkdnh/bVACKpxnJy  
YhMd5CPUrY5mwiadiKDwYHUIgr35Ky4vJjuBkrHY81Fg2NmoXrMURPnD53DLid  
YtvqE2Xn3bKY23Y1IcebJEql06BSC8whxWtWn93+/ZqaKfxOJ0B1LrKh10UBay  
41kFR2bsW2V5rW15c1AsuWaRp2F19/9b/71SVcc61uawpq1NPLwm4JffFxHYb+wy  
5K94UUX7c10lfEoYopWgFQBMLZ8gesCxBd7bLaVrYEvnkySqr1hiko1Bq1GaIdn  
aVwsAkyLloeiyg//OIxNU+fBZ7HGGzkKIAgwOXQjGIzhfQbMCF7Ro03CQVAwGaw  
Yk2X0QOutozISOai+6Fh4R0l5/1cASxW15QfB3HSXQn51OS80ONmJuqrHNromRV  
wdXfirFX610wzsLW7VTgwPo/c30kd6z7gta3FnYnrXFU7k9iNzuHO8GwlTKzaWS  
bRT060+9kPCsc2drszuuKYlmyiVOVkfP5nvNS81GvDX8yz8MgcQj4VsF/DH1Vdy  
x71jj3V63nawluQl16epJfDMCMDYY6r7W6BvWaStTh0X2ZnFJU02vYzawZad+Kb  
L/dp+c1q1JHB8HuY4S5YS6SGym0jLNLFQ2HViZWMMEIBGNJNxCtDdHUVMDkHMCq  
rWZMsG1xx1NIJm2zMyYG//N4xO48LBZ/HHmxkMYwtbV1iImqr768AXJQPYi97SF  
KC7o7JH1YjtI8qVazJ52JbKHTZ490ggKDYEEe6J01DBMrjt3S7sd1k/GYRSSCln  
53K7NKS8gZ6AzFNQyUx8MiUbpqmA8SMLJi21Zmtd5PWivXYtWbSXZhuy10TNtt  
at1Grb+57n5ex3d89inWb97pu1EiqlZIpVa1yqK0vd/fvx/+e86xE/raRGie8RA  
kTISKA+XXJJ7U6MjFYJS9MSkfXsy7nsu80covZdstOQEcz2p6mPhyNhBXiKOROE  
ISj5KTUOJdrCyUCSGVXivdZLJXz8ttYx6oYXZl1bRX//NoxOw1rAKDHMJZXdgVyt  
Uaq3ZXr1ZGY5masKofCeWYbGT/JkKxHJ11UxyTDoL+yuCvpqrzN2M4X8MCbsmVL  
1n4uCWPCbYWWRN/G2YGYJzbRtjpK3UkxaS3zYThBqGYLNwelNNEmYS7Iw8sW9tx  
82zpORITQfkjGUkrzKJqJB82m390qrMz9b/tUUinJFGnKouqR+EL3dp9wpzto2  
fm+jv5+1jdiZ60851x6o5Js3ws0bVUBFYqWabd3dL0eus6vWRD1gVKQJc3YN2M5  
Eua1KjS+nIq0JC//NoxOauy+z7HnpNbVRbi5LptUidgM0qGsapcGR/FTWTBkSui  
SNM9C0rRnhEGmyVFbL4FWBUJrVgt1atza0WXUHQqTSpFNDJjY5/62NeUtWazzvc  
wi5skNKTza74stKJ37rdimSNMLOGhksKBETOj1J5mJxyqv/1nb+p9/h47vLyjJ

```

vaqOKo+TrZrMr01LNpvZ6M5s9t15Iuo+CkkCiJ8uRnmhkwgUM4kQ5oVnn32RyUo
Sfm+q3Im4Oj12mWFdI6z6RQLtOObAjkOV1311C9srVTM+cWxlg//NYxO8v6+5vH
npNPb1lQ5hVrAxM7NHi2cmaC9sz6rtXmsDHycSCjigDCAoaSJMkmClXYnCqQ5pE
iistkZzzvg6ZJU/wqnnoqbJOMJSXqiv/k68zNTjnafJTOjy6o5pg/G57ZWtveWS
OgtvUsdvPwUpcYV3xOWeZXjsktnKipzHx6R0jPbV5LNioE4zbZVaRLIyrJtgkd9
zY0w3VQU2Z3iP7ZG5CgL8516aUMJubEA3F6KT0//NoxNYvTBZSfnmTfNOO0YBg+
iBw8EQuFxdlNs10AUYUC4nMt iMuPCAUMFzySBEI0cGUE8RMZAjVaISdNMMSwfUH
JySO2DTga7wSWYwshUYDhKJpLd5VY/i9opJql+2zNLMi1fHTI179Imo+PqF6VL
tUydhdm/c6482WdbxZUuxxsc/UKgzNpKamUocomBc5yqvdkR3Mat75Jtt7URW21
zgEkaQPfNfZKkibT7BZSeIqg1Lbbt9v9bq0dHxA6su6vjVcdE59aASMGkUTirk
yJGnIkcojk5//NYxOMvDBZGfnpMnM1TkUWJEs9EkjSMtMz2Y6FbUBJmZoBGqrsv
xjhQEGongE6/GoCuGYwwoGJh3n/Gqlmq4YCoCyqvGNdyk3/VDC1LmvxjVjUqt
Hw9nASgEQZqv+pM1ExgJAIVQEzmaN/S7S6gFTf18KMdFYOlqOi0xBTUUzLjk5Lj
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
/VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
" id="12"/>
</item>
</list>
</sounds>
<blocks/>
<variables/>
<scripts>
    <script x="485.3333333333337" y="299.666666666661">
        <custom-block s="$robot get all motors positions"/>
    </script>
    <script x="409" y="608.666666666661">
        <block s="receiveMessage">
            <l>robotWins</l>
        </block>
        <custom-block s="$robot set color leds of motor(s) %s in %txt">
            <custom-block s="$robot all motors"/>
            <l>green</l>
        </custom-block>
        <block s="doPlaySoundUntilDone">
            <l>robotwins</l>
        </block>
        <block s="doWait">
            <l>1</l>
        </block>
        <custom-block s="initialisation"/>
    </script>
    <script x="75" y="609.666666666661">
        <block s="receiveMessage">
            <l>humainWins</l>
        </block>
        <custom-block s="$robot set color leds of motor(s) %s in %txt">
            <custom-block s="$robot all motors"/>
            <l>red</l>
        </custom-block>
        <block s="doPlaySoundUntilDone">
            <l>humanwins</l>
        </block>
        <block s="doWait">
            <l>1</l>
        </block>
        <custom-block s="initialisation"/>
    </script>
    <script x="137" y="533">
        <custom-block s="initialisation"/>

```

```

</script>
<script x="86.66666666666663" y="127">
  <custom-block s="$robot set motor(s) %s %txt">
    <custom-block s="$robot all motors"/>
    <l>stiff</l>
  </custom-block>
</script>
<script x="457" y="157">
  <block s="doSetVar">
    <l>ang</l>
  <block s="reportNewList">
    <list>
      <l>110</l>
      <l>50</l>
      <l>-30</l>
    </list>
  </block>
</block>
</script>
<script x="235" y="200.0000000000006">
  <custom-block s="$robot set motor(s) %s %txt">
    <l>m6</l>
    <l>compliant</l>
  </custom-block>
</script>
<script x="351.7685556875" y="150.000001">
  <custom-block s="$robot all motors"/>
</script>
<script x="73" y="225.6666666666612">
  <block s="receiveMessage">
    <l>moveRobot</l>
  </block>
  <block s="doSetVar">
    <l>robot</l>
    <block s="reportRandom">
      <l>1</l>
      <l>3</l>
    </block>
  </block>
  <block s="doSetVar">
    <l>choix_R</l>
    <block s="reportListItem">
      <block var="robot"/>
      <block var="position"/>
    </block>
  </block>
  <block s="doRepeat">
    <l>2</l>
    <script>
      <custom-block s="$robot set position(s) %n of motor(s) %s in
      %n seconds | wait ? %boolUE">
        <l>-20</l>
        <l>m4</l>
        <l>0.3</l>
      <block s="reportBoolean">
        <l>
          <bool>true</bool>
        </l>
      </block>
    </custom-block>
  </script>
</block>
</script>

```

```

<custom-block s="$robot set position(s) %n of motor(s) %s in
%n seconds | wait ? %boolUE">
  <l>20</l>
  <l>m4</l>
  <l>0.3</l>
  <block s="reportBoolean">
    <l>
      <bool>true</bool>
    </l>
  </block>
</custom-block>
</script>
</block>
<custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
  <l>0</l>
  <l>m4</l>
  <l>0</l>
  <block s="reportBoolean">
    <l>
      <bool>true</bool>
    </l>
  </block>
</custom-block>
<block s="doWait">
  <l>0.5</l>
</block>
<block s="doBroadcast">
  <l>listen</l>
</block>
<custom-block s="$robot set color leds of motor(s) %s in %txt">
  <custom-block s="$robot all motors"/>
  <l>blue</l>
</custom-block>
<block s="doIf">
  <block s="reportEquals">
    <block var="robot"/>
    <l>1</l>
  </block>
  <script>
    <custom-block s="$robot set position(s) %n of motor(s) %s in
%n seconds | wait ? %boolUE">
      <l>-40</l>
      <l>m5</l>
      <l>0</l>
      <l/>
    </custom-block>
  </script>
</block>
<custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
  <block s="reportListItem">
    <block var="robot"/>
    <block var="ang"/>
  </block>
  <l>m6 </l>
  <l>0</l>
  <block s="reportBoolean">
    <l>
      <bool>true</bool>
    </l>
  </block>
</custom-block>

```

```

        </block>
    </custom-block>
</script>
</scripts>
</sprite>
<watcher var="port" style="normal" x="0.00000476837158203125"
y="0.000014781952856424141" color="243,118,29" hidden="true"/>
<watcher var="host" style="normal" x="0.0008974075317382812"
y="0.010991096496596242" color="243,118,29"/>
<watcher var="nbdoigts" style="normal" x="17" y="121"
color="243,118,29" hidden="true"/>
<watcher var="humain" style="normal" x="240" y="13"
color="243,118,29"/>
<watcher var="robot" style="normal" x="351" y="12.00000199999995"
color="243,118,29"/>
<watcher var="winner" style="normal" x="115" y="16" color="243,118,29"
hidden="true"/>
<watcher var="choix" style="normal" x="242" y="33"
color="243,118,29"/>
<watcher var="gain" style="normal" x="306" y="77.00000399999999"
color="243,118,29"/>
<watcher var="choix_R" style="normal" x="351" y="31.00000199999995"
color="243,118,29"/>
<watcher var="position" style="normal" x="16" y="42"
color="243,118,29" hidden="true"/>
<watcher var="ang" style="normal" x="10" y="10" color="243,118,29"
extX="80" extY="70"/>
<watcher var="D" style="normal" x="123" y="113.00000399999999"
color="243,118,29" extX="186" extY="69"/>
<sprite name="Lutin" idx="2" x="-165.2608695652175"
y="34.56521739130437" heading="106" scale="1" volume="100" pan="0"
rotation="1" draggable="true" costume="1"
color="61.65899999999956,0,237.15,1" pen="tip" id="138">
    <costumes>
        <list id="139">
            <item>
                <costume name="alonzo" center-x="45" center-y="60"
image="
YAAAByzOU/AAAMz01EQVR4n01dz2sj2RHwnzC0WkZgMmhwmBgMRoOx5NY4RoY9G
RYMhhyCw6o1FmuyAYcDCQYxEIwPsV2FnLQQhzRErJg+7CD4psHz8UwYgZ8EMyw
YIWQDQgSMRNBDohKof3k6ur3ul+3WurWj4i6DOOW1F9XV32vql69SMS1bGfjia1
lNVtyjCXdxjsRB9n0xh06fj3R00o7txQFpnpaeta9HA7G08E/RuHXvKasksB5m
k+o5aD/q1DK7oWPaGAFlenYH/zIRRpxyg62n13W428SDo3z1UQkEurcXh6nge4
Hqlq1fH81Bai10w2xP/LS15TdnF4O1vPoTO5VMTyEw710+hsjMzAdutFBZjSQza
3sa0EGRq3RowXYiuqzfYHzOQz8qzXTextzEN1eePoVXTTGA3qgsm3z0BWyD5TCy
HrbJRXQC4XrG4BupWMODN09QEeBcfRNeWWAVTzmXEEGetZeXYCtoxgay6uTkGrpk
H9xRoZ39WiJ9vZeOJZKrqOXQwvaE7AFgi25rPyrBUoTb2k12wtq118HQN7YtkCo
dbMC2qihchuNvFAT6vndm6EspGxXdRQq6S6taxmnT/jfoFTXJ1yon7juYK0z2HE
cjkFsZtNPMApjdEWO7D7ffFvhk3xGLVvyFpp6KWPJWHQtreshzH0wvDuYswbU/dxR
ieZaKruczav1ZKrruNe1pZ9FMKV2cZP1cCs6P4BUL48KCU/uaeylsBhL4pw1z2
3QRNTexrQJ7LGmfTJCg2BpLS6VhOpcPrVQyEm1RiCFxVgSg1xcnYLmacoRZJsFz
XjSPjvZWlaZtMRFCwMyaqV96nnQ9xYa4dFBLyAzPSvPUTp3GPQ9BipGNdytcTcqu
TkH9xRPPIItp35gykXwmlqOuorQWF/rk5mnKUhjYMBEb4SWNcktROCokLozi6nj
ewpGLq1NQ2ZmRAp3HRMYiOFJWwYCj/rhV02B/86FtYYB33YSJRKx1LZZrppZJgc
EA8RpVZMC2MJFRzYng5JDdaq/+4okFZF2LHmIL5P12UR4Ea/X549HOiVCQRQGPW
p0dU6BLdKdcCNORzYlQdyHq6bDw3rTSdkqpUrCPCgnXTGQkSmHb2XgCA0FBbtU0
uDiY66kFjD5IGf7dqmm+50SM/Ez0RNfUy4G/Jdh1MIZwVp6Fys6MBVwc8NzeNKA
Ksi7Ebyaip5V3JpekKbteP8v913PaB0Sqp5W21+BE3xzWP+KaiXgshT1LRdd59z
MwCsn7ATwLzmvKrt2PkrFw6kjKv5B+1MJ4jGriggXZrWc3mM2pZT6vnuqZe61r0M
J9Ry1vLatbpidNgp6fVczvQeV1RMmrpXHWZgMJvrjnQDkHWkIJsdjF8S/Fq1b3S
Psrn8b/9wqNvwkubygBBu6NkgeYloJ6loutOv3M7G0/ga+B6xRTo3Vb9By74dbw

```

6nrd0OnAph1SskAzsDFIMjRzalnNsr9nrWvYFYV+9Yktuvr8sYiSWYAwMoP3Ls  
dt8YD3HXaxBFfq2YIJB9jq+2lsmXsb07ZAULAxC8ANkm7ApsxIBDY2COaqsJ/WN  
eV2IIB5ld1s4gG+WzbssXalKrcYCoo33QRFIccW0D7q4tj1+NrQp2Txio+5D6Y0  
ulOrwys1N0ERK832UdpH3RT0IOLAGVqA6BTYeCs75kbwtaW1uCeg7WjfXcX+nej  
34esGuhz3Kk6BjbzdK68pu9R9uOkNcaJ9NK/Be2twNnIoKvA42IgCGy+P7QRER2  
BjpW4NrldMW0h4Oxsck8JiLMnjrLKBjVeZ8c0iRQGYPXhRZadV08K1QjsKtfeRW  
9eU23xGLZsCG/r/i4M5W8vDexeLq1NwVEjYXuNGwf786nheisngxY/MKrOvwms7  
6Pra08BxYPPCi4NSvEIM3E875az1tNLGD2OYgDb76YAXLrTZHL/6fge1QWvn8qn  
ptwfaQkyDHaNwFwdzluAjW6YKK2K2Ejifxtvc6OKC1RkvDuY8LaWD11AlmGjNb5  
jcg5PSBFXgeQ+8MB1GF2GnoaJ5dN+Km5pf2BUnp0LR89dLzS/MaspPp5V20DhHI  
hFzenOYOLOTYgYVuPuIRMw1uNySXJfoMGioVo1M8GpRpfxGJQOhAlFYyW161Hx  
1aYKOym/BSbYY/Pyvc0o1qJvCCrkfpWiwqa01y/wwEir4KPiPuDaXE8MxS4xHBR  
HhX3ANW9LxsAuxGn6zDArrXMG2pKALdqPLcthu7yPMrACLS19jJKPZkpZSCA7xG  
g2L2hQ+qXmFeOAy110DPKo+WestC1hYL76rp+tu1gZJQ4tzdWDYiB0402vjS/Do  
NRX972IS3Mco+wyqA60iItdBm4+Hwc1F3H7OPqTVlfGwVVgpUGxb8vyUa0XulHs  
PvqSbKI7bEdxcSKjuIjbl91cuLd01pp7Tjk9WQP4YR/gx1cAH98C/PgdQGPHX/A  
a08bnfnwL0KoZ32fz9zj/0ZcluZNvb1QX4Kw8yz3maW9j2v0bcJMH+O8/gUnz/Q  
20/tE0/tGq9Q7wmzXjAd5Jo/4aGvXX0Hx/A9D5YHy/wHjYfx2hqZ989dOY0uHFS  
f3FE6jszNg213uqK75ZA/jffwAAoP7qJewXP+9+zn7xc6i/em1YYS9A34HcfH8D  
pfWk6bdWvv7KeMhv1rjXmiowmnLrW20R5zS++firVJ8/1gIXBw5XVPDvfwIAgM6  
nNhQ/e2T53NJ60jDDd7/wBvJNvmvJFOTu+qByAND8gyPQrDDgC9iiRnSsbM4d7r  
THgcOVRCx+AADA1fffCr/v6vtvHf2p04Ns1F+L7+ezR4bf1gCagd2TGyksxpK5t  
PJvO3B5eWi6x9DVNuQ7Of1phCI6u9/YwDWA9B2DzK3FJUC2ukoFSkRTS/Y25iG  
q+N5YZMjnYfkexgX58W3XP4tAaL6/6dmim+9vhJ9fwk9ygaan67QK44pbGw19/g1  
CTpSNbkNzO1saAyHyoXu/WvHNR+NAi7X+6iXXR+M31RmQqZArm6+mKVD2gTKcmL  
fxz9PYy8Q6Op/acFY5gNJ6EkrrSbj48x+h86nd0+to1bqfx/n6K5M111+9NOIEh  
3VgC2Z9h7SQK5VwooFPdnHCA7mnzB7h0SbpFWT2MBGPNknng/BtwQee3595F66D  
VdM8cy8g+5YL+WHfsL6Pbw2X1lhIeFa8Mvzx00e/j+8TkwBq1UJfTfPMoQA5ZEq  
zd5QMkG7UE75fRpk5WZYwTiDDtdk98DAy7VnkNbNTGifDEnz3yUOguNNUFOSx+z  
CtFungEBmwfFGMXQ6SYbdht1BLOAHG702ocQYZrszV/8+Uj4d9h92LKv2PfLDNhg  
E5U9GsqQZiVjnP+3S9/Ivxbr6aNsE4WTODxxs2wNePqg9tM3AyMPP0sTugsdtw  
As2ypn+qhqqcxayOdx6BV6XDDL9IKy3sZnnfY6qUM4onG1Mm+1TDtEmITp8RZRX  
dqGV0Ucr2czrUnF7DrSninIYol2EdFqh2wuqjRceV7G8+hKNCwhXwohOPaJG6sj  
MjPKq723nq5J9FExnpdPOw9Xc0T1NQff7YmlNE11XRh0VXebyDjyzX4AULTmj6t  
HmDoNj6nXJv2bMMg7LyRnUB6i+eOBpE8zR1HesmnA55P1aDp6ZcB/7jvY3p7g+5  
Op53nJpLcyOiky6GRX1DXpw23xvDzc3zs3VNubW09VJ6J1LZodvDCLbIr7s5rnt  
rWc1uLatZ2w5T3pFN2M841WboKzQsYldqmiXgCS3SL9laVr06Fj1hr4GeVtq6Fj  
2R7QHmgR0mjo21UV3gAnznKg4D30/oJBRsL2yeBS6/H1KjusBlIfcAuz90P1DBY  
9tyS3L7w1s1jQtCaS001Z0ZuDiYg0Z1QdodNaoL3WFATkcADh3AWDDHtFs5stGZ  
MsGYx1mxynRN4bija9GTUIyI6Euwnxct6318lamTFXpRXVNuds16EvjmeT8F3yD  
P1/I4O1OcfmxUF+Ck9FPv4KaVv+YzsdxIHu4u6jrFINuBQ+czidhBbikKf/ntz6  
BRXTAFT2HSfdTEbuKuaCq6CGhacB675m/435TVmJLuQU8j6KfwjuFgPpmCXFiMJ  
ekyHr8FvEMq6TRJSiG5SfdRFB7QvAMgccSnVstAo3SPuQLe8aoMbNqAGBgQ/Rbe  
SUOmQyehm0KdPM0ZWn5zS2Zd6rywGbZR3xN6Fd5XoUeqkDHm/ESNbRr9eJgzNq  
kHsf8k6eOyvPDtfZK16FZgPNTdrCvK4liU6twfaUZqojC3QkYj3XFQcy3t/TIe  
C8a+1cwB3Ylu8caR8dibATLu57RewskoldtUKGDxuHOdwne0OrhwpYcnwfEYty  
+QURDsM3G5sZ987kqtBPyWfieWMvLh6HvisfZ/k/83fuReSoofwAAAAAE1FTkSu  
QmCC" id="140"/>  
    </item>  
  </list>  
</costumes>  
<sounds>  
  <list id="141">  
    <item>  
      <sound name="playagain"  
sound="data:audio/mp3;base64,//OIxAAAAAAAAAFhpbmcaAAAPAAAAJA  
AAIiwACAgNDQ0SEhIXFxceHiMjIykpKTExMTc3QkJCSkpKUVFRW1paY2Nqampxc  
XF3d3d/f4yMjJWV1Z2dnai0qLGxubm5v7+/x8fHzc3N1NTd3d3i4uLp6enu7vT0  
9Pn5+f7+/v//AAAawkxBTUUZljk5cgRQAAAAAC42AAA1CCQDwCEAAeoAACIsVUP  
Y+wAA  
AA

AAAAAAAAAAAAAAAAAAAAAA//OIxAANmAzeffggAAGQVkJ7fbb  
5qCJS5F0otB0t+H9hd9SPPIE+J7+gT3p9+t/LpIE+QyjmX//+GNv6i/8h/lMoo  
FKVhd48kjjkbIzbYfFwPhtMkejy7jhBooPPIegVygBejujIYwgNJU4J6nHO3RsK  
pQOcSVLcXjbKei9jnOCPd31PshHfvxW9IViZU4QRwgFTj0EzTVl1Eih86bQPIwb  
b3jT+1YfwLTj8js1ls04YPidQscceXJCvp1b10AJIaIiJ+tjblxMe6PFxHyS5VK  
qCcGH6hVClinfsxvGsqR0saciLCpaSJDMQqKJCYSK0iI0riAmOoXCVamXiaaoh  
FJkirsxWNJ1iliJa1VVuhbiyqhikWNiUn7jI1Zvqo//NIxNweqe5ifkmGeLiopr  
hK/KBeZR1NhtVSua+bjzWwkSqx/itrXzanfudn/lWZvds/fZ9M/mNtRfb10wk1/  
Vf08JNbPiXhmq31Fq29qVELQ+z0aIrKcsWxS6H1goKnAJ23229k6enZ1I0BrjDU  
mQtzsRfedLGIXbjk5C60NSqmry0M9uWs/WILNUbIaPL6//NYxOQtA/pPHnpM3YU  
7w1p8TI/WRqkKFbehN1q8L1LGy0D1QIKi7CxaEsz1UKQOelBZSnIaZTjsKMrooN  
J2gvaBUHAhNM1FIHxqCo3+G2XHK1HvbIbiKS2w39j8cylHNOjXrAhAI/uS5388r  
nPOO6SfZkzvQpsIbAKkjx+hwqKHqgAvtr99Wp7YO5yAdKMDRA2UHmRdfuNahcBO  
TMRJ/11Sua8wNSOLNwftybIhMAiEwI1G//NYxNcpC/Y+XMJG/SRDJDMGwyJCLeo  
LB1NC2kdmZtQ6YUJhGafmHVkhthz0UA9Mk6C0q4HXMIejkMpYy1XG1I1hzWWzKh  
zi86HGnxudNMs02RkRV0ojd3aLctE8aCHA9LJNP17N2t4hYt3JFjXUelxI2xW+  
1Z7hZ8dQvs4oNvY8tj5oa5hxQoIqlqJg1vY8/JyYbVAE/+3/9kibgYBtJAhx2D  
gF4YsyPT7Em2s6AGEyEy//NoxNkujAY2XMJQ2QoARC8mmkif/8FmMakyZVXkrRd  
yqBTfJRMtpNPjCwsNHybsYREGbwQgrQxow0jJzpGUaBnHOdCJVnJGFqrOWzVBrR  
OSfj8qNYmpjU1bsSqp8xpztnt/EtHI22S1s0th23uz0GR/8PsP9xt8xB3yPje997  
3QzH1Sfe3qLShP3XTDjjtJGd014eBqXHTLumikilaoAK53z4/yldgLwtAuZJA6x  
z14HUyoc9j0s8ZEWq2yI0u47yzU+azdnGZRYUE7SyQmLmCyOLRORTYBV//NYxOk  
rjAY+XnpMnTQ4ysy56ircCb4XJ2MepBSGNpIU43H+Hy9paEnoujpBa7Tls1d9Tw  
+kpWMaxHmRquWcTSPMyMdYzgw9eYEHY4co0dL4IMjsdIEZVSCuihSxDkt7zJOMV  
v8ci030zJTikLHcwpHkNboZjICFpyPaACsh3dr61EokAmWgGHXmF5E4YEEEEgDS  
05FBDMRW1b7YVj1jGFY6GYOGW46BbFaiyzSxyKFRRFcs//NYxOEp4+4+fHpG/TW  
dBnnMXcvZKCNaAjTkC+UPXutp9nglzVROHFXM51s08qZOM/CwH+W9gR7kbBLDE  
zZhNH6sQ+HCfwZtMovw4LDbzjUX1OyfJxEwzp4sfWRTE5Ezr2HOWJFD6EofYZTP  
uInaGFL0xxtu/1RQ+xtT52ZpSizvuveMIixWLT+zsdFzrcOwvCQ6aB2ZGBMOSesN  
KmaoSD0zgy71X/mmSc4ngpWeflcsqr7Z//N4xOA8k/42fMPY2aL9fottBFq9hn+  
b/mDBpzD0Y+oAm14eH/cfxvYwtowkZCemw3C8zFqbEbpgCppXdtbsytrL6U8YgK  
E6xNbhqcBYgSIGSBghdAmqxVRd0ICV1EmISumWSF4roOZQJKXmxcs0ndz2WsIX  
W1c4NK66WpN6fe1qspXCMZZmtSpt93dSz+41WyirGopws3LtzqXcytKP2/k091X1  
9ztzsq/vsRS1jPj2rpDctm7cyMX7KpdP8v41KE3R9rYzsWpz+WvnOOawpTVurcN  
90rkKudp5AzSESUOFN3JHnzjgdRCRCBIw8ROYDzWQMzEZHi8a00V//NoxNwuvB  
ZKfVhIAM4kJMYCwcVlgrSpdA1k3VsMHJD1gBPuBZGsEagPOC44gkhJ+VU14MXc  
1a5dMZYMAMaKfTk91rTK1rhA8qfhrIIYNb4WwNdGKQ/fpIi8CfE7LG6KARQxijs  
GgEBPEUBnhyQWwmvbUNNdQDtuiwes8CMDuoUW8fVK8t5Ln5gemgOs6b8cxp4  
3G78DtIaYj47qYifqlRcgajT8IBzGFfNpawjjQMjs10xN3YYgxsLNWnqXzFqMQW  
/au3ogRlirjMCZ1M9V+6LzFxII//OYxOxZjBzrH5vKIGOIEpbTzUqilBC5p9cpF  
B8ZkkNXezdyHKJ24u87oRScu1Eud14jc7r4wU5CwDys7W2j+/amFO5VV/8IDma  
LkNU8qnyLm3Qf5/I9dp8HQkEXc+HLtih18Xw66+F2R1MC/CxwgCIsMa1Djip+pW  
1Np7xJ0ICENHUVJ1OKnfWmeJf3Qe/D01WKj8sYvabWGIImZ16CjJqaLyrB9p9yW  
jP9DbS06Y+4a3W80nI/VQFch4hY8gfLWQsLUeBQu1eXQ8EPY1OxmUrWE5kIeK2a  
JWNBVtnjHkaYq7ULyOfyPcXJ5BWYMDPhQoWIO7fePhtav//x/7Wtv/UKKwqb3HU  
Kpe6bGSEExNb2WL1Bp/qKy61rc71PD18BtY1bBVb1wV76FAhxdYYfW2Pre761vHr  
WDeFH9u2UjMz/qZjTyu7jdror/dgo9i0q0QYksJVPVrenerQWGLhOxmZgOazmo  
1c//N4xOA9HBaSfdh4AGUjThp4/kKUUGJBWWFCYx3LvpZI1TpoeWe1Sz0N1Vs/z  
aIwkDDICPG9fb5A6biJqGmGkoYdhgea1WAcAnybMwUCh1gphSpkKx5qxwiSgCKj  
NX+FBhtJwOsKcrWEgEeAA4FGHChxpEIeoAAC6EgeB1+0kZdpYR3Jq5UYG094CSW  
WgE6jfB0U0UIFbcuXx3jRB13X///8GHS//v//2j2EL1dG2ICQw3Ti6ixbXeaNZdG  
u23qiAuKLyaUYmoLEC7azHJwb41kb3+v/mbKobP3ufVEC/cHKRRgYMLSo8y20uS  
VUPGGyaS3/Mz1081spztOTV//N4xNo50/6bHt6SmXZRe8jBq3SpFsKKsAKZQ70I  
GUBOBoQgHY8YfGJiqwCVGQ0gBNMaB7vmFluaDAwsIi+qvhQAhkGmJGUalBqTpIH  
UR21IgGYOOOhME2IsxcubqF5hZV/pLAnJcKoOdVjM1Gpc0oFRP+/La8vqJ1lpYHI  
FYBjhAYUqC+xtKGcEYwSAALhluznDRoaYscLFCwhhykvauGTpCQ07iK73TJhWN  
YJhCGOCnSX2P4vLZusCEhkCHDZGRdEML8dhM2ImyFh0vR2DTVhryibFecyDXmVP  
CuLqNJFSpbh+s5f5VYudifxYNT3Ua0JOhquiWbGRUQM1//OIxORKO/6GPOZfEN1  
8tNYn3tz9PvyNkaWr51hoXmApU81oksRmpVV2X2YhykQ1NK1Xdy81WGL4G81znW  
/r6x8fwdatNbedfUGuIVM2k+IDkfABADvH8ATMqPUTbi2NGwwbCKHar1Ot/BggR  
FDEX11kgXTOQOKhfJ339YbIZ8wJiOUe9/BoNNiQV2pHzvuCY8A+kvsySekjcJFj

/b9ZS1dsJylUayVQUFhNDLL8ks0OCOLbMtUGSKEQArRB2pJgdAFARO4YAA5Kv9G  
xFCSKaOnBdScmZcuwKCCYK6bOMfuOBjXrXcLbDGz01LAOpncyxtiztleA+BM3b8I  
IzR1KiQmlGyERKgaRBdcID/FTzUPQxs4ygoxs/9rPVZ/PMjCqQ//OIxM4989KeX  
t6S/N5L4oSxzXuCgjEp3pkyABRSS1JpGpGMdyo3/nhP+WwyW7sVU1gpBQfcNeAB  
gAof8AAFUaBbIG/iETKgMCkCEIWxW27sNXQ4mNRUTFwabjFTAQAh1BAYjMbluNc  
wpqMwig3NTY/kmWYuBjkzauWI3IJFik3tq1KavDoLTTLa9fAdBGozyCnYg/xmqI  
9p5KhHkR643Mik9ukXLiKYQpCoLUep2Bwv21v02BJDjla4LOxg+Gx1tUqFCwCQ7  
FevwUWqwfcVyYVa6biZq1svLNGQ+a+t+VH4jzLt1hHEqpWHuCYQKdhhtMSMs9+i  
DyeDSfCzgZt5pZh4km5dkBZE5vYImrG9BAGjMlyFu+v9t7z46eP977///N4xOk  
8s8KWfuPNWcqdrPhgruJE23hkAQFWa9AABfJgcw68cesUDGndBIgvnH09GYMBMI  
3T/DiBdAhAw85Rghimy1UN2WxN6ZktfjdvGswgywGfVOpvMxxgRQtYYpCYiuKCJ  
5AWKwIw5m5SNGtPjlh3b475eJLBx9/c1aesWGyKV0+linwjoMiqt6sN5DruEOPi  
xQmOKhSLOYwYCiutBknTO4iKxKhEYc1QOOjyTudok2Rc+Log4HRQSjSA+kIZGW  
aLOauk0ISylyOGXbdMU/I4nKKHz0p5R8xY21WNlem6heribWf/PGCZqSqtDHv0o  
AQBPmQAVPPXHcg//NoxOU2a6qiftPRUVKoCZW7nK6zzwaYGGF61jGBbjJloCYQCG  
PiQYFqrBQEVMNCFTIWm0teEUwSh7SfyQ6A8hISegkioxAZMWbMsFp05gjzWEcm  
u2suToZi61aCq61re9SNbE8Yp8511i67YeQy0e2LdSUkTrTFNGpaW2WtPLjp8xv  
RmFnFaTi/+28q4Zg60DphGXOGhCLStmTEDiCVTeG0p1pxh6Gio5WbuGqUKcvNUu  
bE3qepJAwWKAytmv75/q/Y9KnGCwGMLjQKVR31CBKqvgbE727P//NoxNYzG76Vv  
tsQ/OqCiIOgEZmRsed5UgQADEYMQ5GCQIIBuYGDREJUvnjeowGFjEA1GgDFpbEL  
YoBXyuHOrjcA1h/151ITIfgNoJpCTeU6oL0hUlnuU7SV7JpTP2WSfDFHvWtYMu  
//rF161gsUauIT5iszsyssXLK1KKNCVrUzXqwq17r+E+3X/EGLN17FevZK4+sfF3  
uXuOMWFPh9q2dz1tZhiwZtwa4ffdfv2tCrBi6tmta+vzF/9fcjf/2hK11zdZo+  
ywxtvolvmurZ/+f65rjftut//N4xNQ5g/51P1x4AZ7V176j3TbjOYVmrcupdSsF  
2QEym3XbpQKBAGACTBNDWMMP4 cwdwgDDaN1MBMBgwbaJJFbBoMI4R8yPAstAxB1  
McwIiWcwTTEmAFFgFTA8CpCATwMGW7pn4dBdYOOGSIBzhy8gCB4UWWgGagQgBjg  
Ajun2YaIyoWIGBBxJBd2A4w8COQKBCICMCDAwIJg9UQhBW7ggTifx/rUFOWy4LD  
wSHA5iYGIGohAS7aTIiAg4wFiJVdkEgqRF919tbBAAYUEI0GLBC6U+zDgRdSe4w  
CqPpFFrHAqqCv0zxdlbUrftSD/oXsxMNAREMmeoIGSza//OoxN1rNBZhH57ZIE9  
MKDgUGGDigiE0uhouUMkDANNGdLwcyCsfk92PRyCaahgsxEHMPAw4LPw8GC4IB1  
CDFhIwwAT4LpmOpJooWCouIEyYGEicFEaCux0DUGBQ4m1Nu3jR7n5PnNTsWjdPb  
yUaQGIbxdlhcdxn4W0566DCQNNZKxAYUNKVmLBCKs7b6ly3WaC00v2/SCJNmAA  
Pz/f/qv93WsssdYZ8xWZFwMCJEMknWhxd/WJwfGow7F2nXupfBDiBwRjPPaWveF  
yFdyt9IIIfpra1I09sFNKep+WEyb/+pAX1ROVA6GxgMQGUTAZZVaAF3THIYMCU  
wWIzBU3NdhwwiAIAHAYg6Fj6bDFxEcWvposXb8Z15j0Dg2JEJ6XmC5W3g+T09hK  
YHUbTVWkf1aC18MbNVsLX7d7fKV1k53LupLJ5rK5hezz1h+6bnL9PMPpYwoXofy  
GEciagida47y3WVrmkME2VO2bz1/5h6meSZ2+Qh6lM3vqmCJ5wiU0hyKeHd1n5i  
NSrenZRYzm4zulf+Cb0tvwI/T+RWSTdiG31iLvOnXoYmgSX7pc5ZK//OIxNNEE5  
aWXdzAAef11cs28t97cz5h/csqliJa79bdvOrjjcl1NavIM6eVS+SWcqS3OSi1Zyy  
pMLncsbGF/lbolaNH6pCZFQgoJV4QAN/gAABir5OnIuxWExMDBv4YwIBBAXTxS  
hGCcmh002VonoPlASbUhmNgrRVHIY4CAwzsVKzQS1+aigcBvGsOw+DSAroQj8iw  
jWGmKKDkg4Dks2irrtDjxeXwpSri3WT61Xm14Rm/UkMkp2v81Yjd8NRW05dJKI8  
gKDgQdEo45ixVLk1IjZR2ZUjczl+31e6acFVBT11jUNNZT1ZcsSmWWw1H1EBoua  
g1hL6shaRKJuajT9Q/FJRaoJZafYpI3jGZE6s9Sx9333hvs2/7/NOcFx4f//OI  
xNVHG7qNv1vAAyCxm4jLbWsr0ald65/Mfl/fzx7zv/eq28+71haryu/hqkjMSgu  
NzGG7cMTudW7yMSunz+thScz7jreGHbmql69y3TgTBwzbSgOGkqBcT5K4AQABGq  
51hzBm5P8R1C5TR2I/Y/BAuczSmFkQDX0/jKn4w4jNCWTCwYbc0IMhaECQgYiFR  
RwKSuZELIFGDtx+Kuf5IomBERhbi4VIBYwVuEk5DxWmbm2GRYCMWF2EAwaMjCUL  
xY7gYhAyIajylntwWMIBDoUhkO4yCuoxZvBGEFnBGQ07C5a0RipVA08FLxYnTTM  
FDY8iGLAoicUjFqhYAR8ZY1JmAcCtxT3jD0NUkoAtYsAw8CrUFhymLKRxyG46F  
Sk//OYxMtd0/qyX5vZIRwMwWIKgHdx1i139dxulaQytkcCtHuL5z1DLBmUpqQhx  
1hGhwzE2AylZU04CebWGHN2avi0KhfmgF2GuQEui2up5IHfRub408wpoC0n1z  
qhwW9yduQf11aKKSNrDN2Aw23JRLN+7PMRj9yHJLTRKPyR1pRIkxnL2196odoJd  
PbqVaT9fvn+IwJ+EtmHqp2H/cx18pyk1PKL+u4d+AnHwu0qyyTKAMq3auwkAqkg  
M5gd/gABT4seBoRCKXJuggGcDEYUETZIuyhJAh0yhJmxgywFRQGYUCTwdkjP9t  
MSMSMtMcgtD021CJYDiTR9j0s5SCmAVk1pxoVCywAFkXFpbdbKkZh419rVqrLVit  
1qtUtLKWrijLXZpeLAS6VXp7TtIb417Vrcdb79fhqN2ef+rjvWsq1Nm2Bzs88qWK  
scgaxTWuQE02ryzu9BeH071ue/8c/q3t6qVLsa1Xp//OIxK4+696q/9rIAxuMei  
dfGtjhcpq38z5S/3uevzwv9/63Pz1+6Le98+pYxzy+0/1NWj9ih1C69NN0s5Qz1  
a/Y3u7jy91+Fu/r/yrctr4Z73GN5f1lq9wXVNTABCsA9wAACq1K1tRmVDg6e+jhb  
61+KPEmk3gk86GRJFwdFxxMFUYJ7CxDojFTKSyWQxnLqYdByKda/SXZowkywt

DUMWZGnMZKAPdT TU5BrBxYZggFQ1Geq/nF4B6OWJJ3aGBG1nb50WHrIEn4csWzx  
R1a+vSv194X1DF1TMhsD+YnrphZwkTudWsicEUMtigsamVheVbPJq7e4+mr9rmu  
91LROzXndyYQ6kakvalvNZODYUOIUycLa+zWqPLxLP9up+o//N4xMU408qa/tvN  
dPtKQrTksw+qTMOXt90ilxjvtb7b6RWxLTpxVNAqI5USAD1ANb7KTlvnsZfKF9k  
IsectJJIwU2J11KRAYk2RNaylogASQFKBVbtvly2jaii48C0350Ewa/1hTRkHApE  
Sz8HzDt gQCSClO803Vi wLreN6r29mIQ/H0da4HRitptorFMen5aMo5yb37J/GHu  
6+ZDXZhrCytrXpMicTr2eYJxk7/WSn vTO1taZmWXptNzaXY60uOjla3ekXNTsTg  
52GHibQ2Urwl t+6k0sKP81JpunZ3Ulh5N+DBOArMcM1EJA AwaHjk gQpxScSCwIg  
ABTAA//NoxNAvu8qrHtsHdCsxrLA/5Y8w/BQAASYIgYOQAA YQgiYkmuY3AKokXw  
M0tbqZIL110rLq qWNyIFi7apy4sqicYCCY5ff1nS2wdEUEuUwlx5CFTVvv1R2NY  
M9ovypr7YnvrM4Ui cjtUhJ93LaW1mXrMPfu5jv908VB2jWuPHYAR0o1xgqD9e  
1pShvRVSRo3LfkGPfMz/bWZnZmZntrWfriU9suqtJB JW114vVKyt+kvqbM5M36m  
fa/NT0zWu1mrCGtlyJxFCeXXL3nadSTB0tymNLmVu//N4xNw7G9553u5Ymc/6Jp  
ybdC7R20rjLsTiF3dVACVriu4S1FEB0TjBgADJggC xg0pZiFWhIDpgodREBKLM  
gBBByMln3Ed5OZmyCQXYC1X8I7SgJTOkwGlp7GWPKcV5ZEqybZ6Kn yrqVSR/jMVx  
nbp a2OX5GiFd+4Rj1E4jqJACizC1nBMNJsUUSD7Wt2VtxUFZw jyYEt0K0Ix4fkC  
EOtw+eoKE5YyU1T// /iOd0MNIEcOROaHpBuKnSzjBGcxVzY GjblGWor6crLK  
EYUU1DpZHL1ny085myzhrWPp5tVUjdG Oumm xsw9yMleAQBo mn r1gttRWqQS8oA/  
/NoxN4z+9Z13u4QlaQUAWHBUGmgQWYTQAA BY8Y8Ch0MmaOykT2gMt40phAhRCzi  
9IWtnkZSELX4jE9ehxQGTX8bfTqq6Ym/kV1bpKv7Fv l2uKoYIoe6mqHwsaUWIak  
AVqaHDw5JTyD6G/KstXA8YMPKKkGxBQs48DREFRZCiREHiU0PjgmD4OluxqV/X1  
///tzao6WI8D0DqlMOEY9HPFUup5r9J6r6WV9WnV5i4aNGarHi67Ld1btxVwy  
hOLPkTRPAoo4Emg1JFaADaKWOb/bgsqTJS//NoxNkzI95ufvaQXRS8Bnt8HKU0  
Y6HIhDgMBD8tuYEB4YC YCjspanHza7SRNpTW2Yua/ooAi zG7mAQGnWlnLLMAP3KZ  
bWH+rzGFsGcOdcPINmVPud456VV/gN7+BP Kxw4EQ/IaEMbxizHicY40DLU9vJ8R  
N7xWGyz5iwu yxpHK2PLWdh joyHAhv1XF foQStLnB Yym+fZOGFCx8GicSVOiKr7a  
hMqHvkLTjaeheB9m8VhLzgC/N44VtTp4+jyQtWk7nbXNgFDCSiMPvPbFZsoSSkm  
kLTGI0pQ//OIxNc/A/513OPTPT6zNqygnPJylDc9S3fpXzfkqz+/4xxreqdk7IH  
HTYz4rs1P1B3AK+Hhm7/bd2ISaKGrlQqVCS+mCmywoWT RTqE71zBYnynhsFGxMo  
YPUtj/URWoSVKqjn9GZGmr5ZYb+7s1ttkp2JUI9R2Q4ZUnJZT861A60pVU1Vm5h  
DCpq0VgsiEqOChYESOAk nkjp7vP/bzMbTMR/oK0jVrQI7KhzaSurV65puTFSwPI  
kmRZJ3x6258kZJet5GcbamWS3e1o2N81yJ1pESM4pKNpP4U2x8d37+d11N Jn14h  
HAro6cSCjjtxHhPLAPeURZ++stuwTMfqISTEXYdRkkIHEctCXIvoGTg9Fx2ZoWs  
PnJ7WBdCewEMDp//NYx04v8+p2fn sNLe3ZnEMdVB82uxD3KS27drDoyEpglG659  
1UYwPitItOoolBaB5IGq8Tyyvn6cFqy2Z/NM9UegkUa3NO CnOSk4jn3pFzWS5ps  
Ysk1PyJmnoI3szV7t1OVvx28+n7U31vD55+Mzbmfzkb aPe8qX/dqqkqdne3/8wX  
vc3D3ueJNy12iDeMoMtVALT7f+yNay/DLSRQUmLHRnce7MExGiJR6XEZ8wBBGVH  
R4//NoxNUsi+5mfnsMnYFxeJRZlg2egEkq1aH4mrHkKidCi0pIeBIw cGtoap5Jr  
WMD4qGLERY0MF Rr05bQH1WsCa7KFiWogerxEsT7FFcpudnG81A7i7H2nULFTz1t  
Esvp71rCrxd3HdNW OmiY7iai8vXghX1guRx6wxV9aS9urx7TVqOu+7h6iBEamds  
g/U8WMFspmJuoKVR2QgBNY eYfeufXD7kCIixR6DSUIXTuAgEag0aJ5PWpS2kJKe  
hxRCJorFy5cYkvV6Q9iEPOLWRBsliB42Szq0dg//NYx0rrBZGXMMQXI oMLScmo  
ogSr1M1Dkj1HOcKNKZJ4tVym1kkZ2vrdGU+UHaEMJct4u4OKum+tKexc7qWhRs  
JZitnKbuW+4W1WtGm1vOVs2h77aVrJtPzX3ZnIfH2pK24zLXP1e5rzP3Z93cvME  
p10zDWKsvbKa/LMX1swArf//821aiCZ6JJbc siCxiSu9pVGabzqg/virt oVJi6I  
JscqoCQQjo6UpoystPC3E4UFzi//NYxOUsBAZGfMMMWYHt5UdGSukC4T4f06h7S  
tHwRHoCypKmHtktvAVEs4JdPjb8SrJK55rxj81JqBW912qtlsrlb8aIqDpZ0ujD  
PMQx3k4ra21Eos2b2zz/725uP8p5xjz7tsd/T7Dd5S q3nJ6cEf6duiVFF2/rP7U  
2218Ze0jpRaOvRmjxspdSIO3doZ/bbJJFKqVMnhvEuSJ0xAiCSM1RLiUs0qKVDR  
JrT1ALB9ar/DMz//NYxNwsc+46XMMMF TZR0WkocNN5vaaa4KrWmk2HKaVU2Ba+V  
QOjpVWaRUVNpvWDrUoPh7fBR011HcMzMFnrJN9fZttYXla+Vyh a12mlppNg6+V  
WlqGZVpV5W1qGu vqYOm iroqmm LJFebVZVV FVnmmaCjv/a9Wk1VFRzRvGm5VMQ U1  
FMy450S41VV  
VV//NYxNE nK+4+fnpQTVVV  
VV  
VV  
P8AAAAAFVV  
</item>  
</list>  
</sounds>

```
<blocks/>
<variables/>
<scripts>
  <script x="131.0000000000006" y="10">
    <block s="receiveKey">
      <l>
        <option>space</option>
      </l>
    </block>
    <block s="doSetVar">
      <l>D</l>
      <block s="reportNewList">
        <list>
          <block s="reportNewList">
            <list>
              <l>2</l>
              <l>3</l>
              <l>1</l>
            </list>
          </block>
          <block s="reportNewList">
            <list>
              <l>1</l>
              <l>2</l>
              <l>3</l>
            </list>
          </block>
          <block s="reportNewList">
            <list>
              <l>3</l>
              <l>1</l>
              <l>2</l>
            </list>
          </block>
        </list>
      </block>
    </block>
    <block s="doSetVar">
      <l>winner</l>
      <block s="reportNewList">
        <list>
          <l>humain</l>
          <l>personne</l>
          <l>robot</l>
        </list>
      </block>
    </block>
    <block s="doSetVar">
      <l>position</l>
      <block s="reportNewList">
        <list>
          <l>pierre</l>
          <l>feuille</l>
          <l>ciseaux</l>
        </list>
      </block>
    </block>
  </script>
  <script x="332.999999999998" y="219.000000000001">
    <block s="doSetVar">
      <l>choix_R</l>
```

```

<block s="reportListItem">
  <block var="robot"/>
  <block var="position"/>
</block>
</block>
</script>
<script x="157.0000000000006" y="246.0000000000001">
  <block s="receiveMessage">
    <l>combat</l>
  </block>
  <block s="doSetVar">
    <l>gain</l>
    <block s="reportListItem">
      <block var="robot"/>
      <block s="reportListItem">
        <block var="humain"/>
        <block var="D"/>
      </block>
    </block>
  </block>
</block>
<block s="doSayFor">
  <block s="reportJoinWords">
    <list>
      <l>vainqueur : </l>
      <block s="reportListItem">
        <block var="gain"/>
        <block var="winner"/>
      </block>
    </list>
  </block>
  <l>2</l>
</block>
<block s="doIf">
  <block s="reportEquals">
    <block var="gain"/>
    <l>1</l>
  </block>
  <script>
    <block s="doBroadcast">
      <l>humainWins</l>
    </block>
  </script>
</block>
<block s="doIf">
  <block s="reportEquals">
    <block var="gain"/>
    <l>3</l>
  </block>
  <script>
    <block s="doBroadcast">
      <l>robotWins</l>
    </block>
  </script>
</block>
<block s="doIf">
  <block s="reportEquals">
    <block var="gain"/>
    <l>2</l>
  </block>
  <script>
    <block s="doPlaySoundUntilDone">

```

```

        <l>playagain</l>
    </block>
    <custom-block s="initialisation" />
</script>
</block>
</script>
</scripts>
</sprite>
<sprite name="Sprite" idx="1" x="-160.56521739130426"
y="-91.695652173913" heading="217" scale="1" volume="100" pan="0"
rotation="1" draggable="true" costume="0"
color="145.35,43.60500000000004,0,1" pen="tip" id="249">
    <costumes>
        <list struct="atomic" id="250"/>
    </costumes>
    <sounds>
        <list struct="atomic" id="251"/>
    </sounds>
    <blocks/>
    <variables/>
    <scripts>
        <script x="10" y="10">
            <custom-block s="set $robot host to %s">
                <l>lily.local</l>
            </custom-block>
        </script>
        <script x="221.53333282470714" y="15.000002000000023">
            <custom-block s="$robot test connection"/>
        </script>
        <script x="383.000000000001" y="13.00000000000028">
            <custom-block s="Leap $flag"/>
        </script>
        <script x="135.000000000001" y="70.83333933333336">
            <custom-block s="$robot set motor(s) %s %txt">
                <l>m5</l>
                <l>compliant</l>
            </custom-block>
        </script>
        <script x="27" y="128.000000000001">
            <block s="receiveKey">
                <l>
                    <option>space</option>
                </l>
            </block>
            <custom-block s="$robot set motor(s) %s %txt">
                <custom-block s="$robot all motors"/>
                <l>stiff</l>
            </custom-block>
            <custom-block s="initialisation"/>
        </script>
        <script x="467.3505879375001" y="21.83333933333356">
            <custom-block s="Detection extension doigt %n">
                <l>1</l>
            </custom-block>
        </script>
        <script x="295.000000000001" y="114.0000000000006">
            <block s="receiveMessage">
                <l>listen</l>
            </block>
            <block s="doSetVar">
                <l>choix</l>

```

```
<l>0</l>
</block>
<block s="doUntil">
  <block s="reportNot">
    <block s="reportEquals">
      <block var="choix"/>
      <l>0</l>
    </block>
  </block>
<script>
  <block s="doIf">
    <block s="reportAnd">
      <custom-block s="Detection extension doigt %n">
        <l>2</l>
      </custom-block>
    <block s="reportAnd">
      <custom-block s="Detection extension doigt %n">
        <l>3</l>
      </custom-block>
    <block s="reportNot">
      <custom-block s="Detection extension doigt %n">
        <l>5</l>
      </custom-block>
    </block>
  </block>
</block>
<script>
  <block s="doSetVar">
    <l>humain</l>
    <l>3</l>
  </block>
  <block s="doSetVar">
    <l>choix</l>
    <block s="reportListItem">
      <block var="humain"/>
      <block var="position"/>
    </block>
  </block>
</script>
</block>
<block s="doIf">
  <block s="reportAnd">
    <custom-block s="Detection extension doigt %n">
      <l>4</l>
    </custom-block>
    <custom-block s="Detection extension doigt %n">
      <l>5</l>
    </custom-block>
  </block>
<script>
  <block s="doSetVar">
    <l>humain</l>
    <l>2</l>
  </block>
  <block s="doSetVar">
    <l>choix</l>
    <block s="reportListItem">
      <block var="humain"/>
      <block var="position"/>
    </block>
  </block>
</script>
```

```

        </script>
    </block>
    <block s="doIf">
        <block s="reportAnd">
            <block s="reportGreaterThan">
                <custom-block s="Leap number of hands"/>
                <l>0</l>
            </block>
        <block s="reportAnd">
            <block s="reportNot">
                <custom-block s="Detection extension doigt %n">
                    <l>2</l>
                </custom-block>
            </block>
        <block s="reportNot">
            <custom-block s="Detection extension doigt %n">
                <l>5</l>
            </custom-block>
        </block>
    </block>
    <script>
        <block s="doSetVar">
            <l>humain</l>
            <l>1</l>
        </block>
        <block s="doSetVar">
            <l>choix</l>
            <block s="reportListItem">
                <block var="humain"/>
                <block var="position"/>
            </block>
        </block>
        </script>
    </block>
    </script>
</block>
<block s="doBroadcast">
    <l>combat</l>
</block>
</script>
<script x="29" y="275">
    <custom-block s="$robot set motor(s) %s %txt">
        <custom-block s="$robot all motors"/>
        <l>compliant</l>
    </custom-block>
</script>
</scripts>
</sprite>
</sprites>
</stage>
<hidden/>
<headers/>
<code>
    <delim/>
<string><#1></string>
<parms_list>Context >> a CommandBlockMorph ("script variables
%scriptVars...") a VariableFrame {}</parms_list>
<tempvars_delim>Context >> a CommandBlockMorph ("script variables
%scriptVars...") a VariableFrame {}</tempvars_delim>

```

```

<doSetVar>Context >> a CommandBlockMorph ("script variables
%scriptVars...") a VariableFrame {}</doSetVar>
</code>
<blocks>
  <block-definition s="$robot motors in group %'alias'" type="reporter"
category="sensing">
    <comment x="0" y="0" w="302" collapsed="false">Return a list of motors
which are grouped in the input alias</comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
      <input type="%txt">group_name</input>
    </inputs>
    <script>
      <block s="doDeclareVariables">
        <list>
          <l>output</l>
        </list>
      </block>
      <block s="doSetVar">
        <l>output</l>
        <block s="reportURL">
          <block s="reportJoinWords">
            <list>
              <custom-block s="$robot robot URL"/>
              <l>/motors/</l>
              <block var="alias"/>
            </list>
          </block>
        </block>
      </block>
    </block>
    <block s="doIfElse">
      <block s="reportEquals">
        <block var="output"/>
        <l/>
      </block>
    <script>
      <custom-block s="$robot popup %txt">
        <block s="reportJoinWords">
          <list>
            <l>Group < </l>
            <block var="alias"/>
            <l> > is not in the aivaible groups of your robot : </l>
            <custom-block s="combine with %repRing items of %l">
              <block s="reifyReporter">
                <autolambda>
                  <custom-block s="join words %mult%txt">
                    <list>
                      <l/>
                      <l/>
                    </list>
                  </custom-block>
                </autolambda>
              <list/>
            </block>
            <custom-block s="$robot all motors groups"/>
          </custom-block>
        </list>
      </block>
    </block>
  </custom-block>

```

```

<block s="doReport">
  <l/>
</block>
</script>
<script>
  <block s="doReport">
    <block s="reportTextSplit">
      <block var="output"/>
      <l>/</l>
    </block>
  </block>
</script>
</block>
</script>
</block-definition>
<block-definition s="$robot all motors" type="reporter" category="sensing">
  <comment x="0" y="0" w="90" collapsed="false">Return a list of all available motors</comment>
  <header/>
  <code/>
  <translations/>
  <inputs/>
  <script>
    <block s="doReport">
      <custom-block s="$robot motors in group %txt">
        <l>motors</l>
      </custom-block>
    </block>
  </script>
</block-definition>
<block-definition s="$robot get all motors positions" type="reporter" category="sensing">
  <comment x="0" y="0" w="170" collapsed="false">Return a list of all motors present positions, in the order of "$robot all motors" block list. Usefull for some advanced programs.</comment>
  <header/>
  <code/>
  <translations/>
  <inputs/>
  <script>
    <block s="doReport">
      <block s="reportTextSplit">
        <block s="reportURL">
          <block s="reportJoinWords">
            <list>
              <custom-block s="$robot robot URL"/>
              <l>/motors/get/positions</l>
            </list>
          </block>
        </block>
        <l>;</l>
      </block>
    </block>
  </script>
</block-definition>
<block-definition s="if %'test' then %'true' else %'false'" type="reporter" category="control">
  <header/>
  <code/>
  <translations/>

```

```

<inputs>
  <input type="%b"/>
  <input type="%anyUE"/>
  <input type="%anyUE"/>
</inputs>
<script>
  <block s="doIfElse">
    <block var="test"/>
    <script>
      <block s="doReport">
        <block s="evaluate">
          <block var="true"/>
          <list/>
        </block>
      </block>
    </script>
    <script>
      <block s="doReport">
        <block s="evaluate">
          <block var="false"/>
          <list/>
        </block>
      </block>
    </script>
  </block>
</script>
</block-definition>
<block-definition s="for %'i' = %'start' to %'end' %'action'" type="command" category="control">
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%upvar"/>
    <input type="%n">1</input>
    <input type="%n">10</input>
    <input type="%cs"/>
  </inputs>
  <script>
    <block s="doDeclareVariables">
      <list>
        <l>step</l>
        <l>tester</l>
      </list>
    </block>
    <block s="doIfElse">
      <block s="reportGreaterThan">
        <block var="start"/>
        <block var="end"/>
      </block>
    </script>
    <block s="doSetVar">
      <l>step</l>
      <l>-1</l>
    </block>
    <block s="doSetVar">
      <l>tester</l>
      <block s="reifyReporter">
        <autolambda>
          <block s="reportLessThan">
            <block var="i"/>

```

```

        <block var="end"/>
    </block>
</autolambda>
<list/>
</block>
</block>
</script>
<script>
    <block s="doSetVar">
        <l>step</l>
        <l>1</l>
    </block>
    <block s="doSetVar">
        <l>tester</l>
        <block s="reifyReporter">
            <autolambda>
                <block s="reportGreater Than">
                    <block var="i"/>
                    <block var="end"/>
                </block>
            </autolambda>
            <list/>
        </block>
    </block>
</script>
</block>
<block s="doSetVar">
    <l>i</l>
    <block var="start"/>
</block>
<block s="doUntil">
    <block s="evaluate">
        <block var="tester"/>
        <list/>
    </block>
</block>
<script>
    <block s="doRun">
        <block var="action"/>
        <list/>
    </block>
    <block s="doChangeVar">
        <l>i</l>
        <block var="step"/>
    </block>
</script>
</block>
</script>
</block-definition>
<block-definition s="$robot get %'register' of motor(s) %'motors'" type="reporter" category="sensing">
    <comment x="0" y="0" w="230.0000009999998" collapsed="false">Get a defined <register> <value> of one motor. Example of some registers : torque_limit, angle_limit, present_temperature, present_position... For more informations about registers, look at the online documentation : http://\$robot-project.github.io/pypot/ </comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%s">
            present_position
    </inputs>
</block-definition>

```

```

<options>position=present_position speed=present_speed load
(force)=present_load temperature=present_temperature
voltage=present_voltage</options>
</input>
<input type="%s">motor_name</input>
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>output</l>
      <l>complete motor list</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>complete motor list</l>
    <custom-block s="$robot all motors"/>
  </block>
  <block s="doIf">
    <block s="reportNot">
      <block s="reportIsA">
        <block var="motors"/>
        <l>
          <option>list</option>
        </l>
      </block>
    </block>
  </block>
  <script>
    <block s="doIfElse">
      <block s="reportOr">
        <block s="reportIsIdentical">
          <block var="motors"/>
          <l>all</l>
        </block>
        <block s="reportIsIdentical">
          <block var="motors"/>
          <l/>
        </block>
      </block>
    </block>
    <script>
      <block s="doSetVar">
        <l>motors</l>
        <custom-block s="$robot all motors"/>
      </block>
    </script>
  </script>
  <script>
    <block s="doSetVar">
      <l>motors</l>
      <block s="reportTextSplit">
        <block var="motors"/>
        <l>
          <option>whitespace</option>
        </l>
      </block>
    </block>
  </script>
  </block>
</script>
<custom-block s="for each %upvar of %l %cs">
  <l>m</l>
  <block var="motors"/>

```

```

<script>
  <block s="doIf">
    <block s="reportNot">
      <block s="reportListContainsItem">
        <block var="complete motor list"/>
        <block var="m"/>
      </block>
    </block>
  </script>
  <custom-block s="$robot popup %txt">
    <block s="reportJoinWords">
      <list>
        <l>Motor </l>
        <block var="m"/>
        <l> > is not in the available motors of your robot : </l>
      <custom-block s="combine with %repRing items of %l">
        <block s="reifyReporter">
          <autolambda>
            <custom-block s="join words %mult%txt">
              <list>
                <l/>
                <l/>
              </list>
            </custom-block>
          </autolambda>
          <list/>
        </block>
        <block var="complete motor list"/>
      </custom-block>
      </list>
    </block>
  </custom-block>
  <block s="doReport">
    <l/>
  </block>
</script>
</block>
</script>
</custom-block>
<block s="doIfElse">
  <block s="reportEquals">
    <block s="reportListLength">
      <block var="motors"/>
    </block>
    <l>1</l>
  </block>
</script>
<block s="doReport">
  <block s="reportURL">
    <block s="reportJoinWords">
      <list>
        <custom-block s="$robot robot URL"/>
        <l>/motors/</l>
      <custom-block s="combine with %repRing items of %l">
        <block s="reifyReporter">
          <autolambda>
            <block s="reportJoinWords">
              <list>
                <block var="#1"/>
                <l>;</l>
                <block var="#2"/>
              </list>
            </block>
          </autolambda>
        </block>
      </custom-block>
    </list>
  </block>
</block>

```

```

        </list>
    </block>
</autolambda>
<list>
    <l>#1</l>
    <l>#2</l>
</list>
</block>
<block var="motors" />
</custom-block>
<l>/get</l>
<block var="register" />
</list>
</block>
</block>
</block>
</script>
<script>
    <block s="doReport">
        <block s="reportTextSplit">
            <block s="reportURL">
                <block s="reportJoinWords">
                    <list>
                        <custom-block s="$robot robot URL"/>
                        <l>/motors</l>
                        <custom-block s="combine with %repRing items of %l">
                            <block s="reifyReporter">
                                <autolambda>
                                    <block s="reportJoinWords">
                                        <list>
                                            <block var="#1" />
                                            <l>;</l>
                                            <block var="#2" />
                                        </list>
                                    </block>
                                </autolambda>
                                <list>
                                    <l>#1</l>
                                    <l>#2</l>
                                </list>
                            </block>
                            <block var="motors" />
                        </custom-block>
                        <l>/get</l>
                        <block var="register" />
                    </list>
                </block>
            </block>
        </block>
        <l>;</l>
    </block>
</block>
</script>
</block>
</script>
</block-definition>
<block-definition s="$robot index of motor %'motor'" type="reporter"
category="sensing">
    <comment x="0" y="0" w="109" collapsed="false">Return the index of a
motor name in the "$robot all motors" block list</comment>
<header/>
<code/>

```

```

<translations/>
<inputs>
    <input type="%txt">motor_name</input>
</inputs>
<script>
    <block s="doDeclareVariables">
        <list>
            <l>i</l>
            <l>complete motor list</l>
        </list>
    </block>
    <block s="doSetVar">
        <l>complete motor list</l>
        <custom-block s="$robot all motors"/>
    </block>
    <block s="doSetVar">
        <l>i</l>
        <l>1</l>
    </block>
    <custom-block s="for each %upvar of %l %cs">
        <l>m</l>
        <block var="complete motor list"/>
        <script>
            <block s="doIf">
                <block s="reportEquals">
                    <block var="m"/>
                    <block var="motor"/>
                </block>
                <script>
                    <block s="doReport">
                        <block var="i"/>
                    </block>
                </script>
            </block>
            <block s="doChangeVar">
                <l>i</l>
                <l>1</l>
            </block>
        </script>
    </custom-block>
    <custom-block s="$robot popup %txt">
        <block s="reportJoinWords">
            <list>
                <l>Motor < /l>
                <block var="motor"/>
                <l>> is not in the aivable motors of your robot : </l>
            <custom-block s="combine with %repRing items of %l">
                <block s="reifyReporter">
                    <autolambda>
                        <custom-block s="join words %mult%txt">
                            <list>
                                <l/>
                                <l/>
                            </list>
                        </custom-block>
                    </autolambda>
                    <list/>
                </block>
                <block var="complete motor list"/>
            </custom-block>
        </list>
    </custom-block>
</script>

```

```

        </block>
    </custom-block>
    <block s="doReport">
        <l/>
    </block>
</script>
</block-definition>
<block-definition s="$robot robot URL" type="reporter"
category="sensing">
    <comment x="0" y="0" w="117" collapsed="false">For internal use
only</comment>
    <header/>
    <code/>
    <translations/>
    <inputs/>
    <script>
        <block s="doReport">
            <block s="reportJoinWords">
                <list>
                    <block var="host"/>
                    <l>:</l>
                    <block var="port"/>
                </list>
            </block>
        </block>
    </script>
</block-definition>
<block-definition s="$robot set motor(s) %'motor' %'compliant'"
type="command" category="control">
    <comment x="0" y="0" w="230.00000099999988"
collapsed="false">Compliance property make motors activly become soft
and movable. You need to activate the compliance if you want to record
a movement by demonstration. The motor(s) input can accept : - string
of a motor name - string of many motors separed with spaces - a Snap!
list of motors like the reporter block "$robot all motors"</comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%s">motor_name</input>
        <input type="%txt" readonly="true">
            compliant
            <options>compliant stiff</options>
        </input>
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>
                <l>comp</l>
            </list>
        </block>
        <block s="doSetVar">
            <l>comp</l>
            <custom-block s="if %b then %anyUE else %anyUE">
                <block s="reportOr">
                    <block s="reportEquals">
                        <block var="compliant"/>
                        <l>compliant</l>
                    </block>
                    <block var="compliant"/>
                </block>
            </custom-block>
        </block>
    </script>
</block-definition>

```

```

<l>1</l>
<l>0</l>
</custom-block>
</block>
<custom-block s="$robot set %txt of motor(s) %s to %s">
  <l>compliant</l>
  <block var="motor"/>
  <block var="comp"/>
</custom-block>
</script>
</block-definition>
<block-definition s="$robot set position(s) %'position' of motor(s)
%'motors' in %'duration' seconds | wait ? %'wait'" type="command"
category="control">
  <comment x="0" y="0" w="230.000009999988" collapsed="false">set
  motor to the desired position (angle) in the desired time. The
  motor(s) input can accept : - string of a motor name - string of many
  motors separated with spaces - a Snap! list of motors like the reporter
  block "$robot all motors"</comment>
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%n">0</input>
    <input type="%s">motor_name</input>
    <input type="%n">2</input>
    <input type="%boolUE"/>
  </inputs>
  <script>
    <block s="doDeclareVariables">
      <list>
        <l>output</l>
        <l>complete motor list</l>
        <l>i</l>
        <l>mot_pos</l>
        <l>querry_URL</l>
      </list>
    </block>
    <block s="doSetVar">
      <l>mot_pos</l>
      <block s="reportNewList">
        <list/>
      </block>
    </block>
    <block s="doSetVar">
      <l>i</l>
      <l>1</l>
    </block>
    <block s="doSetVar">
      <l>complete motor list</l>
      <custom-block s="$robot all motors"/>
    </block>
    <block s="doIf">
      <block s="reportNot">
        <block s="reportIsA">
          <block var="motors"/>
          <l>
            <option>list</option>
          </l>
        </block>
      </block>
    </block>

```

```

<script>
  <block s="doIfElse">
    <block s="reportIsIdentical">
      <block var="motors"/>
      <l/>
    </block>
  </script>
  <script>
    <block s="doSetVar">
      <l>motors</l>
      <custom-block s="$robot all motors"/>
    </block>
  </script>
  <script>
    <block s="doSetVar">
      <l>motors</l>
      <block s="reportTextSplit">
        <block var="motors"/>
        <l>
          <option>whitespace</option>
        </l>
      </block>
    </block>
  </script>
  <block>
    </script>
  </block>
</block>
<custom-block s="for each %upvar of %l %cs">
  <l>m</l>
  <block var="motors"/>
  <script>
    <block s="doIfElse">
      <block s="reportNot">
        <block s="reportListContainsItem">
          <block var="complete motor list"/>
          <block var="m"/>
        </block>
      </block>
    </block>
  </script>
  <custom-block s="$robot popup %txt">
    <block s="reportJoinWords">
      <list>
        <l>Motor </l>
        <block var="m"/>
        <l> is not in the aivaible motors of your robot : </l>
      <custom-block s="combine with %repRing items of %l">
        <block s="reifyReporter">
          <autolambda>
            <custom-block s="join words %mult%txt">
              <list>
                <l/>
                <l/>
              </list>
            </custom-block>
          </autolambda>
        <list/>
      </block>
      <block var="complete motor list"/>
    </custom-block>
  </list>
  </block>
</custom-block>

```

```

<block s="doReport">
  <l/>
</block>
</script>
<script>
  <block s="doIfElse">
    <block s="reportIsA">
      <block var="position"/>
      <l>
        <option>list</option>
      </l>
    </block>
  </script>
  <block s="doAddToList">
    <block s="reportJoinWords">
      <list>
        <block var="m"/>
        <l>:</l>
        <block s="reportListItem">
          <block var="i"/>
          <block var="position"/>
        </block>
      </list>
    </block>
    <block var="mot_pos"/>
  </block>
</script>
<script>
  <block s="doAddToList">
    <block s="reportJoinWords">
      <list>
        <block var="m"/>
        <l>:</l>
        <block var="position"/>
      </list>
    </block>
    <block var="mot_pos"/>
  </block>
</script>
</block>
<block s="doChangeVar">
  <l>i</l>
  <l>1</l>
</block>
</script>
</custom-block>
<block s="doSetVar">
  <l>querry_URL</l>
  <block s="reportURL">
    <block s="reportJoinWords">
      <list>
        <custom-block s="$robot robot URL"/>
        <l>/motors/set/goto/</l>
        <block s="reportJoinWords">
          <list>
            <custom-block s="combine with %repRing items of %l">
              <block s="reifyReporter">
                <autolambda>
                  <block s="reportJoinWords">

```

```

        <list>
            <block var="#1"/>
            <l>:</l>
            <block var="duration"/>
            <l>;</l>
            <block var="#2"/>
        </list>
    </block>
</autolambda>
<list>
    <l>#1</l>
    <l>#2</l>
</list>
</block>
<block var="mot_pos"/>
</custom-block>
<l>:</l>
<block var="duration"/>
</list>
</block>
</list>
</block>
</block>
</block>
</block>
</block>
<block s="doIfElse">
    <block s="evaluate">
        <block var="wait"/>
        <list/>
    </block>
    <script>
        <block s="doRun">
            <block s="reifyReporter">
                <autolambda>
                    <block var="querry_URL"/>
                </autolambda>
                <list/>
            </block>
            <list/>
        </block>
        <block s="doWait">
            <block var="duration"/>
        </block>
    </script>
    <script>
        <block s="doReport">
            <block var="querry_URL"/>
        </block>
    </script>
</block>
</script>
</block-definition>
<block-definition s="$robot reset %'simulation'" type="command"
category="control">
    <comment x="0" y="0" w="182" collapsed="false">Reset the simulation in
    V-rep. It is usefull if you have connection issues with V-rep.
</comment>
<header/>
<code/>
<translations/>
<inputs>
    <input type="%s" readonly="true">

```

```
robot
<options>robot simulation</options>
</input>
</inputs>
<script>
  <block s="doIfElse">
    <block s="reportEquals">
      <block var="simulation"/>
      <l>robot</l>
    </block>
    <script>
      <block s="fork">
        <block s="reifyReporter">
          <autolambda>
            <block s="evaluate">
              <block s="reifyReporter">
                <autolambda>
                  <block s="reportURL">
                    <block s="reportJoinWords">
                      <list>
                        <block var="host"/>
                        <l>/services.php?python=restart</l>
                      </list>
                    </block>
                  </block>
                </autolambda>
              <list/>
            </block>
            <list/>
          </block>
        </autolambda>
      <list/>
    </block>
    <list/>
  </block>
  <block s="fork">
    <block s="reifyReporter">
      <autolambda>
        <block s="evaluate">
          <block s="reifyReporter">
            <autolambda>
              <block s="reportURL">
                <block s="reportJoinWords">
                  <list>
                    <block var="host"/>
                    <l>/reset</l>
                  </list>
                </block>
              </block>
            </autolambda>
          <list/>
        </block>
        <list/>
      </block>
    </autolambda>
  <list/>
  <block>
    <list/>
  </block>
</script>
<script>
```

```

<block s="doReport">
  <block s="reportURL">
    <block s="reportJoinWords">
      <list>
        <custom-block s="$robot robot URL"/>
        <l>/reset-simulation</l>
      </list>
    </block>
  </block>
  </script>
</block>
</script>
</block-definition>
<block-definition s="$robot all recorded moves" type="reporter" category="sensing">
  <comment x="0" y="0" w="164" collapsed="false">Return a list of all previous records filename.</comment>
  <header/>
  <code/>
  <translations/>
  <inputs/>
  <script>
    <block s="doReport">
      <block s="reportTextSplit">
        <block s="reportURL">
          <block s="reportJoinWords">
            <list>
              <custom-block s="$robot robot URL"/>
              <l>/primitive/MovePlayer</l>
            </list>
          </block>
        </block>
        <l>/</l>
      </block>
    </block>
  </script>
</block-definition>
<block-definition s="append %'lists'" type="reporter" category="lists">
  <comment x="0" y="0" w="287" collapsed="false">Take any number of input lists, and create a new list containing the items of the input lists. So APPEND [A B] [C D] where the [ , , ] are lists reports the list [A B C D] not [[A B] [C D]].</comment>
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%mult%1"/>
  </inputs>
  <script>
    <block s="doWarp">
      <script>
        <block s="doIf">
          <block s="reportEquals">
            <block var="lists"/>
            <block s="reportNewList">
              <list/>
            </block>
          </block>
        <script>
          <block s="doReport">

```

```
<block s="reportNewList">
  <list/>
</block>
</block>
</script>
</block>
<block s="doIf">
  <block s="reportEquals">
    <block s="reportListLength">
      <block var="lists"/>
    </block>
    <l>1</l>
  </block>
</script>
<block s="doReport">
  <block s="reportListItem">
    <l>1</l>
    <block var="lists"/>
  </block>
</block>
</script>
</block>
<block s="doIf">
  <block s="reportEquals">
    <block s="reportListItem">
      <l>1</l>
      <block var="lists"/>
    </block>
    <block s="reportNewList">
      <list/>
    </block>
  </block>
</script>
<block s="doReport">
  <custom-block s="append %mult%1">
    <block s="reportCDR">
      <block var="lists"/>
    </block>
  </custom-block>
</block>
</script>
</block>
<block s="doReport">
  <block s="reportCONS">
    <block s="reportListItem">
      <l>1</l>
      <block s="reportListItem">
        <l>1</l>
        <block var="lists"/>
      </block>
    </block>
    <custom-block s="append %mult%1">
      <block s="reportCONS">
        <block s="reportCDR">
          <block s="reportListItem">
            <l>1</l>
            <block var="lists"/>
          </block>
        </block>
        <block s="reportCDR">
          <block var="lists"/>
        </block>
      </block>
    </custom-block>
  </block>
</block>
```

```

        </block>
    </block>
</custom-block>
</block>
</block>
</script>
</block>
</script>
</block-definition>
<block-definition s="reverse %'data'" type="reporter" category="lists">
    <comment x="0" y="0" w="223" collapsed="false">Reports a new list
    containing the items of the input list, but in the opposite order.
    </comment>
<header/>
<code/>
<translations/>
<inputs>
    <input type="%l"/>
</inputs>
<script>
    <block s="doDeclareVariables">
        <list>
            <l>helper</l>
        </list>
    </block>
    <block s="doSetVar">
        <l>helper</l>
    <block s="reifyScript">
        <script>
            <block s="doIf">
                <block s="reportEquals">
                    <block var="input"/>
                    <block s="reportNewList">
                        <list/>
                    </block>
                </block>
            <script>
                <block s="doReport">
                    <block var="result"/>
                </block>
            </script>
        </block>
    <block s="doReport">
        <block s="evaluate">
            <block var="helper"/>
            <list>
                <block s="reportCDR">
                    <block var="input"/>
                </block>
                <block s="reportCONS">
                    <block s="reportListItem">
                        <l>1</l>
                        <block var="input"/>
                    </block>
                    <block var="result"/>
                </block>
            </list>
        </block>
    </block>
</script>
<list>

```

```

        <l>input</l>
        <l>result</l>
    </list>
</block>
</block>
<block s="doWarp">
<script>
    <block s="doReport">
        <block s="evaluate">
            <block var="helper" />
            <list>
                <block var="data" />
                <block s="reportNewList">
                    <list/>
                </block>
            </list>
        </block>
    </block>
</script>
</block>
</script>
</block>
</block-definition>
<block-definition s="remove duplicates from %'data'" type="reporter"
category="lists">
    <comment x="0" y="0" w="209" collapsed="false">Reports a new list
    whose items are the same as in the input list, except that if two or
    more equal items appear in the input list, only the last one is kept
    in the result.</comment>
<header/>
<code/>
<translations/>
<inputs>
    <input type="%1"/>
</inputs>
<script>
    <block s="doWarp">
        <script>
            <block s="doIf">
                <block s="reportEquals">
                    <block var="data" />
                    <block s="reportNewList">
                        <list/>
                    </block>
                </block>
            <script>
                <block s="doReport">
                    <block s="reportNewList">
                        <list/>
                    </block>
                </block>
            </script>
        </block>
    </block>
</script>
<block s="doIfElse">
    <block s="reportListContainsItem">
        <block s="reportCDR">
            <block var="data" />
        </block>
        <block s="reportListItem">
            <l>1</l>
            <block var="data" />
        </block>

```

```

        </block>
        <script>
            <block s="doReport">
                <custom-block s="remove duplicates from %1">
                    <block s="reportCDR">
                        <block var="data" />
                    </block>
                </custom-block>
            </block>
        </script>
        <script>
            <block s="doReport">
                <block s="reportCONS">
                    <block s="reportListItem">
                        <l>1</l>
                        <block var="data" />
                    </block>
                <custom-block s="remove duplicates from %1">
                    <block s="reportCDR">
                        <block var="data" />
                    </block>
                </custom-block>
            </block>
        </script>
        </block>
    </script>
</block-definition>
<block-definition s="sort %'data' ordering with %'function'" type="reporter" category="lists">
    <comment x="0" y="0" w="204" collapsed="false">Reports a sorted version of the list in its first input slot, using the comparison function in the second input slot. For a list of numbers, using < as the comparison function will sort from low to high; using > will sort from high to low.</comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%1"/>
        <input type="%predRing" />
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>
                <l>even items</l>
                <l>odd items</l>
                <l>merge</l>
            </list>
        </block>
        <block s="doSetVar">
            <l>odd items</l>
            <block s="reifyScript">
                <script>
                    <block s="doIf">
                        <block s="reportEquals">
                            <l/>
                            <block s="reportNewList">
                                <list/>

```

```
        </block>
    </block>
    <script>
        <block s="doReport">
            <block s="reportNewList">
                <list/>
            </block>
        </block>
    </script>
</block>
<block s="doReport">
    <block s="reportCONS">
        <block s="reportListItem">
            <l>1</l>
            <l/>
        </block>
        <block s="evaluate">
            <block var="even items"/>
            <list>
                <block s="reportCDR">
                    <l/>
                </block>
            </list>
        </block>
    </block>
</script>
<list/>
</block>
</block>
<block s="doSetVar">
    <l>even items</l>
    <block s="reifyScript">
        <script>
            <block s="doIf">
                <block s="reportEquals">
                    <l/>
                    <block s="reportNewList">
                        <list/>
                    </block>
                </block>
            <script>
                <block s="doReport">
                    <block s="reportNewList">
                        <list/>
                    </block>
                </block>
            </script>
        </block>
    </block>
    <block s="doReport">
        <block s="evaluate">
            <block var="odd items"/>
            <list>
                <block s="reportCDR">
                    <l/>
                </block>
            </list>
        </block>
    </block>
</script>
<list/>
```

```
</block>
</block>
<block s="doSetVar">
  <l>merge</l>
  <block s="reifyScript">
    <script>
      <block s="doIf">
        <block s="reportEquals">
          <block var="#1"/>
          <block s="reportNewList">
            <list/>
          </block>
        </block>
      <script>
        <block s="doReport">
          <block var="#2"/>
        </block>
      </script>
    </block>
  <block s="doIf">
    <block s="reportEquals">
      <block var="#2"/>
      <block s="reportNewList">
        <list/>
      </block>
    </block>
  <script>
    <block s="doReport">
      <block var="#1"/>
    </block>
  </script>
  </block>
<block s="doIfElse">
  <block s="evaluate">
    <block var="function"/>
    <list>
      <block s="reportListItem">
        <l>1</l>
        <block var="#1"/>
      </block>
      <block s="reportListItem">
        <l>1</l>
        <block var="#2"/>
      </block>
    </list>
  </block>
  <script>
    <block s="doReport">
      <block s="reportCONS">
        <block s="reportListItem">
          <l>1</l>
          <block var="#1"/>
        </block>
        <block s="evaluate">
          <block var="merge"/>
          <list>
            <block s="reportCDR">
              <block var="#1"/>
            </block>
            <block var="#2"/>
          </list>
        </block>
      </block>
    </block>
  </script>
</block>
```

```
        </block>
    </block>
</block>
</script>
<script>
    <block s="doReport">
        <block s="reportCONS">
            <block s="reportListItem">
                <l>1</l>
                <block var="#2"/>
            </block>
            <block s="evaluate">
                <block var="merge"/>
            <list>
                <block var="#1"/>
                <block s="reportCDR">
                    <block var="#2"/>
                </block>
            </list>
        </block>
    </block>
    </script>
</block>
</script>
<list>
    <l>#1</l>
    <l>#2</l>
</list>
</block>
</block>
<block s="doIf">
    <block s="reportEquals">
        <block var="data"/>
        <block s="reportNewList">
            <list/>
        </block>
    </block>
    <block s="reportCDR">
        <block var="data"/>
    </block>
    <block s="reportNewList">
        <list/>
    </block>
    <block s="doReport">
        <block s="reportNewList">
            <list/>
        </block>
    </block>
    <block s="doReport">
        <block s="reportCONS">
            <block s="reportListItem">
                <l>1</l>
                <block var="#2"/>
            </block>
            <block s="evaluate">
                <block var="merge"/>
            <list>
                <block var="#1"/>
                <block s="reportCDR">
                    <block var="#2"/>
                </block>
            </list>
        </block>
    </block>
    </script>
</block>
<block s="doIf">
    <block s="reportEquals">
        <block s="reportCDR">
            <block var="data"/>
        </block>
        <block s="reportNewList">
            <list/>
        </block>
    </block>
    <block s="doReport">
        <block s="reportCONS">
            <block s="reportListItem">
                <l>1</l>
                <block var="#2"/>
            </block>
            <block s="evaluate">
                <block var="merge"/>
            <list>
                <block var="#1"/>
                <block s="reportCDR">
                    <block var="#2"/>
                </block>
            </list>
        </block>
    </block>
    </script>
</block>
</block>
```

```

<block s="doReport">
  <block s="evaluate">
    <block var="merge"/>
    <list>
      <custom-block s="sort %l ordering with %predRing">
        <block s="evaluate">
          <block var="odd items"/>
          <list>
            <block var="data"/>
          </list>
        </block>
        <block var="function"/>
      </custom-block>
      <custom-block s="sort %l ordering with %predRing">
        <block s="evaluate">
          <block var="even items"/>
          <list>
            <block var="data"/>
          </list>
        </block>
        <block var="function"/>
      </custom-block>
    </list>
  </block>
</block>
</script>
</block-definition>
<block-definition s="$robot set '%register' of motor(s) '%motors' to
%'value'" type="command" category="control">
  <comment x="0" y="0" w="230.000009999988" collapsed="false">Set a
defined <value> to a defined <register> of one or many motors. Example
of some registers : torque_limit, angle_limit, safe_compliant,
compliant... For more informations about registers, look at the online
documentation : http://$robot-project.github.io/pypot/ The motor(s)
input can accept : - string of a motor name - string of many motors
separated with spaces - a Snap! list of motors like the reporter block
"$robot all motors"</comment>
<header/>
<code/>
<translations/>
<inputs>
  <input type="%txt">
    <options>position=goal_position speed=moving_speed max
    torque(%)=torque_limit compliancy(True or
    False)=compliant</options>
  </input>
  <input type="%s">motor_name</input>
  <input type="%s">value(s)</input>
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>output</l>
      <l>complete motor list</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>complete motor list</l>
    <custom-block s="$robot all motors"/>
  </block>
  <block s="doIf">

```

```

<block s="reportNot">
  <block s="reportIsA">
    <block var="motors"/>
    <l>
      <option>list</option>
    </l>
  </block>
</block>
<script>
  <block s="doIfElse">
    <block s="reportIsIdentical">
      <block var="motors"/>
      <l>all</l>
    </block>
  </script>
  <script>
    <block s="doSetVar">
      <l>motors</l>
      <custom-block s="$robot all motors"/>
    </block>
  </script>
  <script>
    <block s="doSetVar">
      <l>motors</l>
      <block s="reportTextSplit">
        <block var="motors"/>
        <l>
          <option>whitespace</option>
        </l>
      </block>
    </block>
  </script>
  </block>
</script>
</block>
<custom-block s="for each %upvar of %l %cs">
  <l>m</l>
  <block var="motors"/>
  <script>
    <block s="doIf">
      <block s="reportNot">
        <block s="reportListContainsItem">
          <block var="complete motor list"/>
          <block var="m"/>
        </block>
      </block>
    </block>
  </script>
  <custom-block s="$robot popup %txt">
    <block s="reportJoinWords">
      <list>
        <l>Motor < /l>
        <block var="m"/>
        <l> > is not in the aivaible motors of your robot : </l>
      <custom-block s="combine with %repRing items of %l">
        <block s="reifyReporter">
          <autolambda>
            <custom-block s="join words %mult%txt">
              <list>
                <l/>
                <l/>
              </list>
            </custom-block>

```

```

        </autolambda>
        <list/>
    </block>
    <block var="complete motor list"/>
</custom-block>
</list>
</block>
</custom-block>
<block s="doReport">
    <l/>
</block>
</script>
</block>
</script>
</custom-block>
<block s="doReport">
    <block s="reportURL">
        <block s="reportJoinWords">
            <list>
                <custom-block s="$robot robot URL"/>
                <l>/motors/set/registers/</l>
                <block s="reportJoinWords">
                    <list>
                        <custom-block s="combine with %repRing items of %l">
                            <block s="reifyReporter">
                                <autolambda>
                                    <block s="reportJoinWords">
                                        <list>
                                            <block var="#1"/>
                                            <l>:</l>
                                            <block var="register"/>
                                            <l>:</l>
                                            <block var="value"/>
                                            <l>;</l>
                                            <block var="#2"/>
                                        </list>
                                    </block>
                                </autolambda>
                            <list>
                                <l>#1</l>
                                <l>#2</l>
                            </list>
                        </block>
                        <block var="motors"/>
                    </custom-block>
                    <l>:</l>
                    <block var="register"/>
                    <l>:</l>
                    <block var="value"/>
                </list>
            </block>
        </list>
    </block>
</list>
</block>
</block>
</block>
</script>
</block-definition>
<block-definition s="$robot get %'running' behaviours" type="reporter" category="sensing">
    <header/>
    <code/>

```

```

<translations/>
<inputs>
  <input type="%s" readonly="true">
    all
    <options>all running</options>
  </input>
</inputs>
<script>
  <block s="doIfElse">
    <block s="reportIsIdentical">
      <block var="running"/>
      <l>running</l>
    </block>
    <script>
      <block s="doReport">
        <block s="reportTextSplit">
          <block s="reportURL">
            <block s="reportJoinWords">
              <list>
                <custom-block s="$robot robot URL"/>
                <l>/primitives</l>
                <l>running</l>
              </list>
            </block>
          </block>
          <l>/</l>
        </block>
      </block>
    </script>
    <script>
      <block s="doReport">
        <block s="reportTextSplit">
          <block s="reportURL">
            <block s="reportJoinWords">
              <list>
                <custom-block s="$robot robot URL"/>
                <l>/primitives</l>
                <l/>
              </list>
            </block>
          </block>
          <l>/</l>
        </block>
      </block>
    </script>
  </block>
</script>
</block-definition>
<block-definition s="$robot play move %'record_name' | speed x %'speed'" type="reporter" category="control">
  <comment x="0" y="0" w="230.0000009999988" collapsed="false">Play the movement of a previous recorded move. The <record_name> input is the name of a .record filename which should be in the same directory where you started the web server (with the command "$robot-snap $robot-ergo" for example). You can change the play speed with the <speed> input.
  </comment>
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%txt">move_name</input>

```

```

<input type="%n">1</input>
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>time</l>
    </list>
  </block>
  <block s="doDeclareVariables">
    <list>
      <l>wait</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>wait</l>
    <block s="reportBoolean">
      <l>
        <bool>true</bool>
      </l>
    </block>
  </block>
  <block s="doIfElse">
    <block s="reportListContainsItem">
      <custom-block s="$robot all recorded moves"/>
      <block var="record_name"/>
    </block>
    <script>
      <block s="doSetVar">
        <l>time</l>
        <block s="reportURL">
          <block s="reportJoinWords">
            <list>
              <custom-block s="$robot robot URL"/>
              <l>/primitive/MovePlayer/</l>
              <block var="record_name"/>
              <l>/start/</l>
              <block var="speed"/>
            </list>
          </block>
        </block>
      </block>
    </block>
    <block s="doIf">
      <block var="wait"/>
      <script>
        <block s="doWait">
          <block var="time"/>
        </block>
      </script>
      <comment w="90" collapsed="false">ugly wait to stop feature.
      TODO : change with a looking at running primitive</comment>
    </block>
  </script>
  <script>
    <custom-block s="$robot popup %txt">
      <block s="reportJoinWords">
        <list>
          <l>Error : <</l>
          <block var="record_name"/>
          <l>> is not is the avaible records (look at the block $robot
          all records to see all recorded moves) </l>
        <custom-block s="$robot all recorded moves"/>

```

```

        </list>
    </block>
</custom-block>
</script>
</block>
<block s="doReport">
    <block var="record_name"/>
</block>
</script>
</block-definition>
<block-definition s="$robot sequence %'mov'" type="reporter"
category="control">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%mult%repRing"/>
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>
                <l>out</l>
            </list>
        </block>
        <block s="doSetVar">
            <l>out</l>
            <l/>
        </block>
        <custom-block s="for each %upvar of %l %cs">
            <l>item</l>
            <block var="mov"/>
            <script>
                <block s="doSetVar">
                    <l>out</l>
                    <block s="reportJoinWords">
                        <list>
                            <block s="reportCallCC">
                                <block var="item"/>
                            </block>
                            <l>;</l>
                            <block var="out"/>
                        </list>
                    </block>
                </block>
            </script>
        </custom-block>
        <block s="doReport">
            <block var="out"/>
        </block>
    </script>
</block-definition>
<block-definition s="$robot concurrent %'movements'" type="reporter"
category="control">
    <comment x="0" y="0" w="202" collapsed="false">All reports input are
run concurrently. You can use this block to play concurrently many
recorded move</comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%mult%repRing"/>

```

```
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>results</l>
      <l>iterator</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>results</l>
    <block s="reportNewList">
      <list/>
    </block>
  </block>
  <block s="doSetVar">
    <l>iterator</l>
    <l>0</l>
  </block>
  <block s="doRepeat">
    <block s="reportListLength">
      <block var="movements"/>
    </block>
    <script>
      <block s="fork">
        <block s="reifyScript">
          <script>
            <block s="doAddToList">
              <block s="reportCallCC">
                <block s="reportListItem">
                  <block var="iterator"/>
                  <block var="movements"/>
                </block>
              </block>
              <block var="results"/>
            </block>
          </script>
          <list/>
        </block>
        <list/>
      </block>
    </script>
  </block>
  <block s="doChangeVar">
    <l>iterator</l>
    <l>1</l>
  </block>
  <custom-block s="yield"/>
</script>
</block>
<block s="doWaitUntil">
  <block s="reportEquals">
    <block s="reportListLength">
      <block var="movements"/>
    </block>
    <block s="reportListLength">
      <block var="results"/>
    </block>
  </block>
</block>
<block s="doReport">
  <block var="results"/>
</block>
</script>
```

```

</block-definition>
<block-definition s="map %'function' over %'lists'" type="reporter"
category="lists">
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%repRing"/>
    <input type="%mult%l"/>
  </inputs>
  <script>
    <block s="doWarp">
      <script>
        <block s="doDeclareVariables">
          <list>
            <l>mapone</l>
            <l>mapmany</l>
          </list>
        </block>
        <block s="doSetVar">
          <l>mapone</l>
          <block s="reifyScript">
            <script>
              <block s="doIf">
                <custom-block s="empty? %l">
                  <block var="data"/>
                </custom-block>
                <script>
                  <block s="doReport">
                    <block s="reportNewList">
                      <list/>
                    </block>
                  </block>
                </script>
              </block>
              <block s="doReport">
                <block s="reportCONS">
                  <block s="evaluate">
                    <block var="function"/>
                    <list>
                      <block s="reportListItem">
                        <l>1</l>
                        <block var="data"/>
                      </block>
                    </list>
                  </block>
                <block s="evaluate">
                  <block var="mapone"/>
                  <list>
                    <block s="reportCDR">
                      <block var="data"/>
                    </block>
                  </list>
                </block>
              </block>
            </script>
          <list>
            <l>data</l>
          </list>
        </block>
      </script>
    </block>
  </script>

```

```
</block>
<block s="doSetVar">
  <l>mapmany</l>
  <block s="reifyScript">
    <script>
      <block s="doIf">
        <custom-block s="empty? %l">
          <block s="reportListItem">
            <l>1</l>
            <block var="data lists"/>
          </block>
        </custom-block>
      <script>
        <block s="doReport">
          <block s="reportNewList">
            <list/>
          </block>
        </block>
      </script>
    </block>
    <block s="doReport">
      <block s="reportCONS">
        <block s="evaluate">
          <block var="function"/>
          <custom-block s="map %repRing over %mult%l">
            <block s="reifyReporter">
              <autolambda>
                <block s="reportListItem">
                  <l>1</l>
                  <l/>
                </block>
              </autolambda>
              <list/>
            </block>
            <list>
              <block var="data lists"/>
            </list>
          </custom-block>
        </block>
        <block s="evaluate">
          <block var="mapmany"/>
          <list>
            <custom-block s="map %repRing over %mult%l">
              <block s="reifyReporter">
                <autolambda>
                  <block s="reportCDR">
                    <l/>
                  </block>
                </autolambda>
                <list/>
              </block>
              <list>
                <block var="data lists"/>
              </list>
            </custom-block>
          </list>
        </block>
      </block>
    </block>
  </script>
<list>
```

```

        <l>data lists</l>
    </list>
</block>
</block>
<block s="doIfElse">
    <custom-block s="empty? %l">
        <block s="reportCDR">
            <block var="lists" />
        </block>
    </custom-block>
<script>
    <block s="doReport">
        <block s="evaluate">
            <block var="mapone" />
        <list>
            <block s="reportListItem">
                <l>1</l>
                <block var="lists" />
            </block>
        </list>
        </block>
    </block>
</script>
<script>
    <block s="doReport">
        <block s="evaluate">
            <block var="mapmany" />
        <list>
            <block var="lists" />
        </list>
        </block>
    </block>
</script>
</block>
</script>
</block>
</block>
</block-definition>
<block-definition s="empty? %'data'" type="predicate" category="lists">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%l" />
    </inputs>
    <script>
        <block s="doReport">
            <block s="reportEquals">
                <block var="data" />
                <block s="reportNewList">
                    <list/>
                </block>
            </block>
        </block>
    </script>
</block-definition>
<block-definition s="keep items such that %'pred' from %'data'" type="reporter" category="lists">
    <header/>
    <code/>
    <translations/>

```

```

<inputs>
  <input type="%predRing" />
  <input type="%l" />
</inputs>
<script>
  <block s="doWarp">
    <script>
      <block s="doIf">
        <custom-block s="empty? %l">
          <block var="data" />
        </custom-block>
      <script>
        <block s="doReport">
          <block s="reportNewList">
            <list/>
          </block>
        </block>
      </script>
    </block>
  <block s="doIfElse">
    <block s="evaluate">
      <block var="pred" />
      <list>
        <block s="reportListItem">
          <l>1</l>
          <block var="data" />
        </block>
      </list>
    </block>
  <script>
    <block s="doReport">
      <block s="reportCONS">
        <block s="reportListItem">
          <l>1</l>
          <block var="data" />
        </block>
        <custom-block s="keep items such that %predRing from %l">
          <block var="pred" />
          <block s="reportCDR">
            <block var="data" />
          </block>
        </custom-block>
      </block>
    </block>
  </script>
<script>
  <block s="doReport">
    <custom-block s="keep items such that %predRing from %l">
      <block var="pred" />
      <block s="reportCDR">
        <block var="data" />
      </block>
    </custom-block>
  </block>
</script>
</block>
</script>
</block-definition>

```

```

<block-definition s="combine with %'function' items of %'data'" type="reporter" category="lists">
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%repRing"/>
    <input type="%l"/>
  </inputs>
  <script>
    <block s="doWarp">
      <script>
        <block s="doIf">
          <custom-block s="empty? %l">
            <block s="reportCDR">
              <block var="data"/>
            </block>
          </custom-block>
        <script>
          <block s="doReport">
            <block s="reportListItem">
              <l>1</l>
              <block var="data"/>
            </block>
          </block>
        </script>
      </block>
    <block s="doReport">
      <block s="evaluate">
        <block var="function"/>
        <list>
          <block s="reportListItem">
            <l>1</l>
            <block var="data"/>
          </block>
          <custom-block s="combine with %repRing items of %l">
            <block var="function"/>
            <block s="reportCDR">
              <block var="data"/>
            </block>
          </custom-block>
        </list>
      </block>
    </block>
  </script>
</block>
</script>
</block-definition>
<block-definition s="join words %'words'" type="reporter" category="operators">
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%mult%txt"/>
  </inputs>
  <script>
    <block s="doWarp">
      <script>
        <block s="doIf">
          <custom-block s="empty? %l">

```

```

<block s="reportCDR">
    <block var="words" />
</block>
</custom-block>
<script>
    <block s="doReport">
        <block s="reportListItem">
            <l>1</l>
            <block var="words" />
        </block>
    </block>
</script>
</block>
<block s="doReport">
    <block s="reportJoinWords">
        <list>
            <block s="reportListItem">
                <l>1</l>
                <block var="words" />
            </block>
            <block s="reportJoinWords">
                <list>
                    <l> </l>
                    <block s="evaluate">
                        <block s="reifyReporter">
                            <autolambda>
                                <custom-block s="join words %mult%txt">
                                    <block s="reportCDR">
                                        <block var="words" />
                                    </block>
                                </custom-block>
                            </autolambda>
                            <list/>
                        </block>
                    <list/>
                </block>
            </list>
        </block>
    </list>
</block>
</block>
</script>
</block>
</script>
</block-definition>
<block-definition s="list $arrowRight sentence %'data'" type="reporter"
category="operators">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%1" />
    </inputs>
    <script>
        <block s="doWarp">
            <script>
                <block s="doReport">
                    <custom-block s="combine with %repRing items of %1">
                        <block s="reifyReporter">
                            <autolambda>
                                <custom-block s="join words %mult%txt">

```

```

        <list>
            <l/>
            <l/>
        </list>
    </custom-block>
</autolambda>
<list/>
</block>
<block var="data" />
</custom-block>
</block>
</script>
</block>
</script>
</block-definition>
<block-definition s="sentence $arrowRight list %'text'" type="reporter"
category="operators">
<header/>
<code/>
<translations/>
<inputs>
    <input type="%txt"/>
</inputs>
<script>
    <block s="doWarp">
        <script>
            <block s="doReport">
                <block s="reportTextSplit">
                    <block var="text" />
                    <l>
                        <option>whitespace</option>
                    </l>
                </block>
            </block>
        </script>
    </block>
</script>
</block-definition>
<block-definition s="for each %'item' of %'data' %'action'"
type="command" category="lists">
<header/>
<code/>
<translations/>
<inputs>
    <input type="%upvar"/>
    <input type="%l"/>
    <input type="%cs"/>
</inputs>
<script>
    <block s="doUntil">
        <custom-block s="empty? %l">
            <block var="data" />
        </custom-block>
        <script>
            <block s="doSetVar">
                <l>item</l>
                <block s="reportListItem">
                    <l>1</l>
                    <block var="data" />
                </block>
            </block>
        </script>
    </block>

```

```

<block s="doRun">
  <block var="action"/>
  <list>
    <block s="reportListItem">
      <l>1</l>
      <block var="data"/>
    </block>
  </list>
</block>
<block s="doSetVar">
  <l>data</l>
  <block s="reportCDR">
    <block var="data"/>
  </block>
</block>
</script>
</block>
</script>
</block-definition>
<block-definition s="word $arrowRight list %'word'" type="reporter"
category="operators">
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%txt"/>
  </inputs>
  <script>
    <block s="doWarp">
      <script>
        <block s="doReport">
          <block s="reportTextSplit">
            <block var="word"/>
            <l>
              <option>letter</option>
            </l>
          </block>
        </block>
      </script>
    </block>
  </script>
</block-definition>
<block-definition s="sum %'nums'" type="reporter" category="operators">
  <comment x="0" y="0" w="202" collapsed="false">Takes any number of
numbers as inputs (use the left and right arrowheads to adjust the
number of input slots) and reports the result of adding them all, so
ISUM (4) (100) (8)) reports 112.</comment>
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%mult%n"/>
  </inputs>
  <script>
    <block s="doIf">
      <block s="reportEquals">
        <block var="nums"/>
        <block s="reportNewList">
          <list/>
        </block>
      </block>
    </block>
  </script>

```

```

<script>
  <block s="doReport">
    <l>0</l>
  </block>
</script>
</block>
<block s="doReport">
  <block s="reportSum">
    <block s="reportListItem">
      <l>1</l>
      <block var="nums" />
    </block>
    <custom-block s="sum %mult%n">
      <block s="reportCDR">
        <block var="nums" />
      </block>
    </custom-block>
  </block>
</block>
</script>
</block-definition>
<block-definition s="product %'nums'" type="reporter"
category="operators">
  <comment x="0" y="0" w="205" collapsed="false">Takes any number of
numbers as inputs (use the left and right arrowheads to adjust the
number of input slots) and reports the result of multiplying them all,
so (PRODUCT (4) (100) (8)) reports 3200.</comment>
<header/>
<code/>
<translations/>
<inputs>
  <input type="%mult%n"/>
</inputs>
<script>
  <block s="doIf">
    <block s="reportEquals">
      <block var="nums" />
      <block s="reportNewList">
        <list/>
      </block>
    </block>
  </block>
  <script>
    <block s="doReport">
      <l>1</l>
    </block>
  </script>
</block>
<block s="doReport">
  <block s="reportProduct">
    <block s="reportListItem">
      <l>1</l>
      <block var="nums" />
    </block>
    <custom-block s="product %mult%n">
      <block s="reportCDR">
        <block var="nums" />
      </block>
    </custom-block>
  </block>
</block>
</script>

```

```

</block-definition>
<block-definition s="all of %'preds'" type="predicate"
category="operators">
  <comment x="0" y="0" w="247.9999999999997" collapsed="false">Takes
  any number of Boolean (true/false) inputs (use the left and right
  arrowheads to adjust the number of input slots) and reports TRUE only
  if all of the inputs are TRUE, otherwise FALSE. Like AND but for
  multiple inputs.</comment>
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%mult%boolUE"/>
  </inputs>
  <script>
    <block s="doIf">
      <block s="reportEquals">
        <block var="preds"/>
        <block s="reportNewList">
          <list/>
        </block>
      </block>
    </block>
    <script>
      <block s="doReport">
        <block s="reportBoolean">
          <l>
            <bool>true</bool>
          </l>
        </block>
      </block>
    </script>
  </block>
  <block s="doReport">
    <block s="reportAnd">
      <block s="evaluate">
        <block s="reportListItem">
          <l>1</l>
          <block var="preds"/>
        </block>
        <list/>
      </block>
      <custom-block s="all of %mult%boolUE">
        <block s="reportCDR">
          <block var="preds"/>
        </block>
      </custom-block>
    </block>
  </block>
  </script>
</block-definition>
<block-definition s="any of %'preds'" type="predicate"
category="operators">
  <comment x="0" y="0" w="240" collapsed="false">Takes any number of
  Boolean (true/false) inputs (use the left and right arrowheads to
  adjust the number of input slots) and reports TRUE if at least one
  input is TRUE, otherwise FALSE.</comment>
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%mult%boolUE"/>

```

```

</inputs>
<script>
  <block s="doIf">
    <block s="reportEquals">
      <block var="preds" />
      <block s="reportNewList">
        <list/>
      </block>
    </block>
    <script>
      <block s="doReport">
        <block s="reportBoolean">
          <l>
            <bool>false</bool>
          </l>
        </block>
      </block>
    </script>
  </block>
  <block s="doReport">
    <block s="reportOr">
      <block s="evaluate">
        <block s="reportListItem">
          <l>1</l>
          <block var="preds" />
        </block>
        <list/>
      </block>
      <custom-block s="any of %mult%boolUE">
        <block s="reportCDR">
          <block var="preds" />
        </block>
      </custom-block>
    </block>
  </block>
</script>
</block-definition>
<block-definition s="yield" type="command" category="other">
  <header/>
  <code/>
  <translations/>
  <inputs/>
  <script>
    <block s="doWait">
      <l>0.0000000000000001</l>
    </block>
  </script>
</block-definition>
<block-definition s="$robot create & start record move %'record_name' with motor(s) %'motors input'" type="command" category="control">
  <comment x="0" y="0" w="230.000009999988" collapsed="false">Create and start the record of a defininied move.. The <record_name> input is used to store the recorded move. The move is stored in the directory where you started the web server (with the command "$robot-snap $robot-ergo" for example), and can be replayed even if you close Snap! The motor(s) input can accept : - string of a motor name - string of many motors separated with spaces - a Snap! list of motors like the reporter block "$robot all motors" If the motor(s) input is empty, all motors will be recorded.</comment>
  <header/>
  <code/>

```

```

<translations/>
<inputs>
  <input type="%s">move_name</input>
  <input type="%s"/>
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>motors_list</l>
      <l>complete motor list</l>
      <l>complete aliases list</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>motors_list</l>
    <block s="reportNewList">
      <list/>
    </block>
  </block>
  <block s="doSetVar">
    <l>complete motor list</l>
    <custom-block s="$robot all motors"/>
  </block>
  <block s="doIf">
    <block s="reportIsIdentical">
      <block var="record_name"/>
      <l/>
    </block>
    <script>
      <custom-block s="$robot popup %txt">
        <l>Input error, record name must not be empty</l>
      </custom-block>
      <block s="doReport">
        <l/>
      </block>
    </script>
  </block>
  <block s="doIfElse">
    <block s="reportEquals">
      <block var="motors input"/>
      <l/>
    </block>
    <script>
      <block s="doReport">
        <block s="reportURL">
          <block s="reportJoinWords">
            <list>
              <custom-block s="$robot robot URL"/>
              <l>/primitive/MoveRecorder/</l>
              <block var="record_name"/>
              <l>/start/</l>
              <custom-block s="combine with %repRing items of %l">
                <block s="reifyReporter">
                  <autolambda>
                    <block s="reportJoinWords">
                      <list>
                        <block var="#1"/>
                        <l>;</l>
                        <block var="#2"/>
                      </list>
                    </block>
                  </autolambda>
                </block>
              </custom-block>
            </list>
          </block>
        </block>
      </script>
    </block>
  </block>
</script>

```

```
</autolambda>
<list>
  <l>#1</l>
  <l>#2</l>
</list>
</block>
<custom-block s="$robot all motors"/>
</custom-block>
</list>
</block>
</block>
</block>
</script>
<script>
<block s="doIfElse">
<block s="reportIsA">
<block var="motors input"/>
<l>
  <option>list</option>
</l>
</block>
<script>
<block s="doSetVar">
<l>motors_list</l>
<custom-block s="append %mult%l">
<list>
  <block var="motors_list"/>
  <block var="motors input"/>
</list>
</custom-block>
</block>
</script>
<script>
<block s="doIfElse">
<block s="reportOr">
<block s="reportIsA">
<block var="motors input"/>
<l>
  <option>number</option>
</l>
</block>
<block s="reportIsA">
<block var="motors input"/>
<l>
  <option>text</option>
</l>
</block>
</block>
<script>
<block s="doSetVar">
<l>motors_list</l>
<custom-block s="append %mult%l">
<list>
  <block var="motors_list"/>
  <block s="reportTextSplit">
    <block var="motors input"/>
    <l>
      <option>whitespace</option>
    </l>
  </block>
</list>
```

```

        </custom-block>
    </block>
</script>
<script>
    <custom-block s="$robot popup %txt">
        <l>Input error, you should look at help (right click on
            the block)</l>
    </custom-block>
</script>
</block>
</script>
</block>
</script>
</block>
<custom-block s="for each %upvar of %l %cs">
    <l>m</l>
    <block var="motors_list"/>
<script>
    <block s="doIf">
        <block s="reportNot">
            <block s="reportListContainsItem">
                <block var="complete motor list"/>
                <block var="m"/>
            </block>
        </block>
    </script>
    <block s="doIf">
        <block s="reportEquals">
            <block var="complete aliases list"/>
            <l>0</l>
            <comment w="90" collapsed="false">Set all aliases here for
                optimisation issues</comment>
        </block>
    <script>
        <block s="doSetVar">
            <l>complete aliases list</l>
            <custom-block s="$robot all motors groups"/>
        </block>
    </script>
</block>
<block s="doIfElse">
    <block s="reportListContainsItem">
        <block var="complete aliases list"/>
        <block var="m"/>
    </block>
    <script>
        <block s="doSetVar">
            <l>motors_list</l>
            <custom-block s="append %mult%l">
                <list>
                    <block var="motors_list"/>
                    <custom-block s="$robot motors in group %txt">
                        <block var="m"/>
                    </custom-block>
                </list>
            </custom-block>
        </block>
    </script>
<script>
    <custom-block s="$robot popup %txt">
        <block s="reportJoinWords">

```

```

        <list>
            <l>Motor </l>
            <block var="m"/>
            <l>does not exist in your robot. </l>
        </list>
    </block>
</custom-block>
<block s="doReport">
    <l/>
</block>
</script>
</block>
</script>
</block>
</script>
</block>
</script>
</block>
</script>
</block>
<custom-block s="$robot set motor(s) %s %txt">
    <block var="motors_list"/>
    <l>compliant</l>
</custom-block>
<block s="doReport">
    <block s="reportURL">
        <block s="reportJoinWords">
            <list>
                <custom-block s="$robot robot URL"/>
                <l>/primitive/MoveRecorder</l>
                <block var="record_name"/>
                <l>/start</l>
                <custom-block s="combine with %repRing items of %l">
                    <block s="reifyReporter">
                        <autolambda>
                            <block s="reportJoinWords">
                                <list>
                                    <block var="#1"/>
                                    <l>;</l>
                                    <block var="#2"/>
                                </list>
                            </block>
                        </autolambda>
                        <list>
                            <l>#1</l>
                            <l>#2</l>
                        </list>
                    </block>
                <block var="motors_list"/>
            </custom-block>
        </list>
    </block>
</block>
</script>
</block-definition>
<block-definition s="$robot stop record & save move %'record_name'" type="command" category="control">
    <comment x="0" y="0" w="489" collapsed="false">Stop recording the desired move record. Be careful, you must have previously defined a move record with the "create move ... with motor(s) ...
    block</comment>
<header/>
<code/>
<translations/>

```

```

<inputs>
  <input type="%s">move_name</input>
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>motors</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>motors</l>
    <block s="reportTextSplit">
      <block s="reportURL">
        <block s="reportJoinWords">
          <list>
            <custom-block s="$robot robot URL"/>
            <l>/primitive/MoveRecorder/</l>
            <block var="record_name"/>
            <l>/get_motors</l>
          </list>
        </block>
      </block>
    </block>
    <l>/</l>
  </block>
</block>
<custom-block s="$robot set motor(s) %s %txt">
  <block var="motors"/>
  <block s="reportBoolean">
    <l>
      <bool>false</bool>
    </l>
  </block>
</custom-block>
<block s="doReport">
  <block s="reportURL">
    <block s="reportJoinWords">
      <list>
        <custom-block s="$robot robot URL"/>
        <l>/primitive/MoveRecorder/</l>
        <block var="record_name"/>
        <l>/stop</l>
      </list>
    </block>
  </block>
</block>
</script>
</block-definition>
<block-definition s="$robot stop move %'record_name'" type="command"
category="control">
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%s">move_name</input>
  </inputs>
  <script>
    <block s="doReport">
      <block s="reportURL">
        <block s="reportJoinWords">
          <list>
            <custom-block s="$robot robot URL"/>

```

```

        <l>/primitive/MovePlayer/</l>
        <block var="record_name"/>
        <l>/stop</l>
    </list>
    </block>
    </block>
</block>
</script>
</block-definition>
<block-definition s="$robot popup %'message'" type="command"
category="other">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%txt"/>
    </inputs>
    <script>
        <block s="doRun">
            <block s="reportJSFunction">
                <list>
                    <l>message</l>
                </list>
                <l>alert(message);</l>
            </block>
            <list>
                <block var="message"/>
            </list>
        </block>
    </script>
</block-definition>
<block-definition s="pool map %'function' over %'lists'" type="reporter"
category="lists">
    <comment x="0" y="0" w="204" collapsed="false">Works as the map block
    (see map help), but it proceeds iterations concurrently.</comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%repRing"/>
        <input type="%mult%l"/>
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>
                <l>results</l>
                <l>iterator</l>
                <l>input_list</l>
                <l>list</l>
            </list>
        </block>
        <block s="doSetVar">
            <l>results</l>
            <block s="reportNewList">
                <list/>
            </block>
        </block>
        <block s="doSetVar">
            <l>iterator</l>
            <l>0</l>
        </block>

```

```
<block s="doRepeat">
  <block s="reportListLength">
    <block s="reportListItem">
      <l>1</l>
      <block var="lists" />
    </block>
  </block>
<script>
  <block s="doChangeVar">
    <l>iterator</l>
    <l>1</l>
  </block>
  <block s="doSetVar">
    <l>input_list</l>
    <block s="reportNewList">
      <list/>
    </block>
  </block>
<custom-block s="for each %upvar of %l %cs">
  <l>list</l>
  <block var="lists" />
  <script>
    <block s="doAddToList">
      <block s="reportListItem">
        <block var="iterator" />
        <block var="list" />
      </block>
      <block var="input_list" />
    </block>
  </script>
</custom-block>
<block s="fork">
  <block s="reifyScript">
    <script>
      <block s="doAddToList">
        <block s="evaluate">
          <block var="function" />
          <block var="input_list" />
        </block>
        <block var="results" />
      </block>
    </script>
    <list/>
  </block>
  <list/>
</block>
<custom-block s="yield"/>
</script>
</block>
<block s="doWaitUntil">
  <block s="reportEquals">
    <block s="reportListLength">
      <block var="results" />
    </block>
    <block s="reportListLength">
      <block s="reportListItem">
        <l>1</l>
        <block var="lists" />
      </block>
    </block>
  </block>
</block>
```

```

    </block>
    <block s="doReport">
        <block var="results"/>
    </block>
</script>
</block-definition>
<block-definition s="$robot play concurrently moves %'inputs'" type="reporter" category="control">
    <comment x="0" y="0" w="260" collapsed="false">Play previous recorded move concurrently. Inputs can be : * move name (string) * many moves name separated by whitespace * any reporter block, like sequential or play sequentialy</comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%mult%s"/>
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>
                <l>move_names</l>
                <l>reporters</l>
                <l>tmp_string</l>
                <l>tmp_reporter</l>
            </list>
        </block>
        <block s="doSetVar">
            <l>move_names</l>
            <block s="reportNewList">
                <list/>
            </block>
        </block>
        <block s="doSetVar">
            <l>tmp_string</l>
            <block s="reportNewList">
                <list/>
            </block>
        </block>
        <block s="doSetVar">
            <l>reporters</l>
            <block s="reportNewList">
                <list/>
            </block>
        </block>
    </script>
    <custom-block s="for each %upvar of %l %cs">
        <l>item</l>
        <block var="inputs"/>
        <script>
            <block s="doIfElse">
                <block s="reportOr">
                    <block s="reportIsA">
                        <block var="item"/>
                        <l>
                            <option>text</option>
                        </l>
                    </block>
                    <block s="reportIsA">
                        <block var="item"/>
                        <l>
                            <option>number</option>
                        </l>
                    </block>
                </block>
            </block>
        </script>
    </custom-block>

```

```
        </l>
    </block>
</block>
<script>
    <block s="doSetVar">
        <l>move_names</l>
        <custom-block s="append %mult%l">
            <list>
                <block var="move_names"/>
                <block s="reportTextSplit">
                    <block var="item"/>
                    <l>;</l>
                </block>
            </list>
        </custom-block>
    </block>
</script>
<script>
    <block s="doIfElse">
        <block s="reportIsA">
            <block var="item"/>
            <l>
                <option>list</option>
            </l>
        </block>
    </block>
</script>
<script>
    <block s="doSetVar">
        <l>move_names</l>
        <custom-block s="append %mult%l">
            <list>
                <block var="move_names"/>
                <block var="item"/>
            </list>
        </custom-block>
    </block>
</script>
<script>
    <block s="doIfElse">
        <block s="reportIsA">
            <block var="item"/>
            <l>
                <option>reporter</option>
            </l>
        </block>
    </block>
</script>
<script>
    <block s="doAddToList">
        <block var="item"/>
        <block var="reporters"/>
    </block>
</script>
<script>
    <custom-block s="$robot popup %txt">
        <l>Input is not valid. See help (right click on the
        block)</l>
    </custom-block>
</script>
</block>
</script>
</block>
</script>
</block>
```

```

        </script>
    </custom-block>
<custom-block s="for each %upvar of %l %cs">
    <l>item</l>
    <block var="move_names" />
    <script>
        <block s="fork">
            <block s="reifyScript">
                <script>
                    <block s="doAddToList">
                        <block s="evaluate">
                            <block s="reifyReporter">
                                <autolambda>
                                    <custom-block s="$robot play move %txt | speed x %n">
                                        <l/>
                                        <l>1</l>
                                    </custom-block>
                                </autolambda>
                                <list/>
                            </block>
                            <list>
                                <block var="item" />
                            </list>
                        </block>
                        <block var="tmp_string" />
                    </block>
                </script>
                <list/>
            </block>
            <list/>
        </block>
        <custom-block s="yield" />
    </script>
</custom-block>
<block s="doSetVar">
    <l>tmp_reporter</l>
    <custom-block s="$robot concurrent %mult%repRing">
        <list>
            <block s="reifyReporter">
                <script/>
                <list/>
            </block>
        </list>
    </custom-block>
</block>
<block s="doWaitUntil">
    <block s="reportEquals">
        <block s="reportListLength">
            <block var="tmp_string" />
        </block>
        <block s="reportListLength">
            <block var="move_names" />
        </block>
    </block>
</block>
<block s="doReport">
    <custom-block s="append %mult%l">
        <list>
            <block var="tmp_reporter" />
            <block var="tmp_string" />
        </list>

```

```

        </custom-block>
    </block>
</script>
<scripts>
    <comment x="131" y="660.2" w="265" collapsed="false">TODO :
        understand why a sequential input blocks return items on a list
        rather than separated with whitespace</comment>
</scripts>
</block-definition>
<block-definition s="$robot play sequentially moves %'inputs'" type="reporter" category="control">
    <comment x="0" y="0" w="267" collapsed="false">Play previous recorded moves sequentially. Inputs can be : * move name (string) * many moves name separated by whitespace * any reporter block like concurrent or play concurrently</comment>
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%mult%s"/>
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>
                <l>move_names</l>
                <l>reporters</l>
                <l>out</l>
            </list>
        </block>
        <block s="doSetVar">
            <l>move_names</l>
            <block s="report newList">
                <list/>
            </block>
        </block>
        <block s="doSetVar">
            <l>reporters</l>
            <block s="report newList">
                <list/>
            </block>
        </block>
        <custom-block s="for each %upvar of %l %cs">
            <l>item</l>
            <block var="inputs"/>
            <script>
                <block s="doIfElse">
                    <block s="reportOr">
                        <block s="reportIsA">
                            <block var="item"/>
                            <l>
                                <option>text</option>
                            </l>
                        </block>
                        <block s="reportIsA">
                            <block var="item"/>
                            <l>
                                <option>number</option>
                            </l>
                        </block>
                    </block>
                </script>
            </block>
        </block>
    </script>

```

```

<block s="doSetVar">
  <l>move_names</l>
  <custom-block s="append %mult%l">
    <list>
      <block var="move_names"/>
      <block s="reportTextSplit">
        <block var="item"/>
        <l>;</l>
      </block>
    </list>
  </custom-block>
</block>
</script>
<script>
  <block s="doIfElse">
    <block s="reportIsA">
      <block var="item"/>
      <l>
        <option>list</option>
      </l>
    </block>
  </script>
  <block s="doSetVar">
    <l>move_names</l>
    <custom-block s="append %mult%l">
      <list>
        <block var="move_names"/>
        <block var="item"/>
      </list>
    </custom-block>
  </block>
</script>
<script>
  <block s="doIfElse">
    <block s="reportIsA">
      <block var="item"/>
      <l>
        <option>reporter</option>
      </l>
    </block>
  </script>
  <block s="doAddToList">
    <block var="item"/>
    <block var="reporters"/>
  </block>
</script>
<script>
  <custom-block s="$robot popup %txt">
    <l>Input is not valid. See help (right click on the
    block)</l>
  </custom-block>
</script>
</block>
</script>
</block>
</script>
</custom-block>
<block s="doReport">
  <custom-block s="join words %mult%txt">

```

```

<list>
  <custom-block s="combine with %repRing items of %l">
    <block s="reifyReporter">
      <autolambda>
        <custom-block s="join words %mult%txt">
          <list>
            <l/>
            <l/>
          </list>
        </custom-block>
      </autolambda>
    <list/>
  </block>
  <custom-block s="map %repRing over %mult%l">
    <block s="reifyReporter">
      <autolambda>
        <custom-block s="$robot play move %txt | speed x %n">
          <l/>
          <l>1</l>
        </custom-block>
      </autolambda>
    <list/>
  </block>
  <list>
    <block var="move_names"/>
  </list>
  </custom-block>
</custom-block>
<custom-block s="$robot sequence %mult%repRing">
  <list>
    <block s="reifyReporter">
      <script/>
      <list/>
    </block>
  </list>
  </custom-block>
</list>
</custom-block>
</block>
</script>
</block-definition>
<block-definition s="$robot all motors groups" type="reporter" category="sensing">
  <comment x="0" y="0" w="171" collapsed="false">Return a list of all aliases. Alias is a keyword for representing many motors at once.
  </comment>
  <header/>
  <code/>
  <translations/>
  <inputs/>
  <script>
    <block s="doReport">
      <block s="reportTextSplit">
        <block s="reportURL">
          <block s="reportJoinWords">
            <list>
              <custom-block s="$robot robot URL"/>
              <l>/motors/</l>
              <l>alias</l>
            </list>
          </block>
        </block>
      </block>
    </block>
  </script>

```

```

        </block>
        <l>/</l>
    </block>
</block>
</script>
</block-definition>
<block-definition s="items %'i' to %'j' of %'list'" type="reporter"
category="lists">
    <comment x="0" y="0" w="146" collapsed="false">Return a sublist which
contains items in the interval of 2 input numbers. Original list is
not modified.</comment>
<header/>
<code/>
<translations/>
<inputs>
    <input type="%n"/>
    <input type="%n"/>
    <input type="%l"/>
</inputs>
<script>
    <block s="doDeclareVariables">
        <list>
            <l>result</l>
        </list>
    </block>
    <block s="doSetVar">
        <l>result</l>
        <block s="reportNewList">
            <list/>
        </block>
    </block>
    <block s="doIf">
        <block s="reportLessThan">
            <block var="i"/>
            <l>0</l>
        </block>
        <script>
            <block s="doSetVar">
                <l>i</l>
                <block s="reportSum">
                    <block s="reportListLength">
                        <block var="list"/>
                    </block>
                    <block var="i"/>
                </block>
            </block>
        </script>
    </block>
    <block s="doIf">
        <block s="reportLessThan">
            <block var="j"/>
            <l>0</l>
        </block>
        <script>
            <block s="doSetVar">
                <l>j</l>
                <block s="reportSum">
                    <block s="reportListLength">
                        <block var="list"/>
                    </block>
                    <block var="j"/>
                </block>
            </block>
        </script>
    </block>
</script>

```

```

        </block>
    </block>
</script>
</block>
<custom-block s="for %upvar = %n to %n %cs">
    <l>elem</l>
    <custom-block s="if %b then %anyUE else %anyUE">
        <block var="i"/>
        <block var="i"/>
        <l>1</l>
    </custom-block>
    <custom-block s="if %b then %anyUE else %anyUE">
        <block var="j"/>
        <block var="j"/>
        <block s="reportListLength">
            <block var="list"/>
        </block>
    </custom-block>
    <script>
        <block s="doAddToList">
            <block s="reportListItem">
                <block var="elem"/>
                <block var="list"/>
            </block>
            <block var="result"/>
        </block>
    </script>
</custom-block>
<block s="doReport">
    <block var="result"/>
</block>
</script>
</block-definition>
<block-definition s="$robot play move %'record_name' in reverse | speed
x %'speed'" type="reporter" category="control">
    <comment x="0" y="0" w="230.0000009999988" collapsed="false">Play in
reverse the movement of a previous recorded move. The <record_name>
input is the name of a .record filename which should be in the same
directory where you started the web server (with the command "$robot-
snap $robot-ergo" for example). You can change the play speed with the
<speed> input.</comment>
<header/>
<code/>
<translations/>
<inputs>
    <input type="%s">move_name</input>
    <input type="%n">1</input>
</inputs>
<script>
    <block s="doDeclareVariables">
        <list>
            <l>time</l>
        </list>
    </block>
    <block s="doDeclareVariables">
        <list>
            <l>wait</l>
        </list>
    </block>
    <block s="doSetVar">
        <l>wait</l>

```

```

<block s="reportBoolean">
  <l>
    <bool>true</bool>
  </l>
</block>
</block>
<block s="doIfElse">
  <block s="reportListContainsItem">
    <custom-block s="$robot all recorded moves"/>
    <block var="record_name"/>
  </block>
</block>
<script>
  <block s="doSetVar">
    <l>time</l>
    <block s="reportURL">
      <block s="reportJoinWords">
        <list>
          <custom-block s="$robot robot URL"/>
          <l>/primitive/MovePlayer/</l>
          <block var="record_name"/>
          <l>/start/</l>
          <block var="speed"/>
          <l>/backwards</l>
        </list>
      </block>
    </block>
  </block>
</block>
<block s="doIf">
  <block var="wait"/>
  <script>
    <block s="doWait">
      <block var="time"/>
    </block>
  </script>
  <comment w="90" collapsed="false">ugly wait to stop feature.
  TODO : change with a looking at running primitive</comment>
</block>
</script>
<script>
  <custom-block s="$robot popup %txt">
    <block s="reportJoinWords">
      <list>
        <l>Error : <</l>
        <block var="record_name"/>
        <l>> is not is the avaible records (look at the block $robot
        all records to see all recorded moves) </l>
        <custom-block s="$robot all recorded moves"/>
      </list>
    </block>
  </custom-block>
</script>
</block>
<block s="doReport">
  <block var="record_name"/>
</block>
</script>
</block-definition>
<block-definition s="$robot test connection" type="reporter"
category="sensing">
  <header/>
  <code/>

```

```
<translations/>
<inputs/>
<script>
  <block s="doIfElse">
    <custom-block s="ping http:// %s">
      <custom-block s="$robot robot URL"/>
    </custom-block>
    <script>
      <block s="doReport">
        <l>Connection ok!</l>
      </block>
    </script>
    <script>
      <block s="doReport">
        <l>You may have connection troubles. Check the host
        variable</l>
      </block>
    </script>
  </block>
</script>
</block-definition>
<block-definition s="index of %'var' in %'list'" type="reporter"
category="lists">
  <comment x="0" y="0" w="194" collapsed="false">Return the index of a
  item in a list</comment>
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%s"/>
    <input type="%l"/>
  </inputs>
  <script>
    <block s="doDeclareVariables">
      <list>
        <l>i</l>
      </list>
    </block>
    <block s="doSetVar">
      <l>i</l>
      <l>1</l>
    </block>
    <custom-block s="for each %upvar of %l %cs">
      <l>m</l>
      <block var="list"/>
      <script>
        <block s="doIf">
          <block s="reportEquals">
            <block var="m"/>
            <block var="var"/>
          </block>
        <script>
          <block s="doReport">
            <block var="i"/>
          </block>
        </script>
      </block>
      <block s="doChangeVar">
        <l>i</l>
        <l>1</l>
      </block>
    </custom-block>
  </script>
</block>
```

```
</script>
</custom-block>
<block s="doReport">
  <l>0</l>
</block>
</script>
</block-definition>
<block-definition s="$robot http:// %'input'" type="reporter"
category="other">
<header/>
<code/>
<translations/>
<inputs>
  <input type="%s"/>
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>output</l>
      <l>timer_init</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>timer_init</l>
    <block s="getTimer"/>
  </block>
  <block s="doSetVar">
    <l>output</l>
    <block s="reportNewList">
      <list/>
    </block>
  </block>
  <block s="fork">
    <block s="reifyScript">
      <script>
        <block s="doAddToList">
          <block s="reportURL">
            <block var="input"/>
          </block>
          <block var="output"/>
        </block>
      </script>
      <list/>
    </block>
    <list/>
  </block>
  <block s="dowaitUntil">
    <block s="reportOr">
      <block s="reportGreaterThan">
        <block s="reportDifference">
          <block s="getTimer"/>
          <block var="timer_init"/>
        </block>
        <l>3.5</l>
      </block>
      <block s="reportGreaterThan">
        <block s="reportListLength">
          <block var="output"/>
        </block>
        <l>0</l>
      </block>
    </block>
  </block>
</script>
```

```

        </block>
    </block>
<block s="doIf">
    <block s="reportGreaterThan">
        <block s="reportDifference">
            <block s="getTimer"/>
            <block var="timer_init"/>
        </block>
        <l>3</l>
    </block>
    <script>
        <custom-block s="$robot popup %txt">
            <block s="reportJoinWords">
                <list>
                    <l>Robot is not connected to </l>
                    <block var="input"/>
                </list>
            </block>
        </custom-block>
        <block s="doReport">
            <l>error</l>
        </block>
    </script>
</block>
<block s="doReport">
    <block s="reportListItem">
        <l>1</l>
        <block var="output"/>
    </block>
</block>
</script>
<scripts>
    <script x="452.9853535625002" y="75.0000070000001">
        <custom-block s="$robot all motors"/>
    </script>
    <script x="539.8916025624999" y="95.00000100000011">
        <block s="reportURL">
            <block var="input"/>
        </block>
    </script>
    <script x="397.2265645" y="240.00000399999993">
        <block s="doSetVar">
            <l>output</l>
            <l>0</l>
        </block>
    </script>
    <script x="433" y="179.2">
        <block s="reportListLength">
            <l/>
        </block>
    </script>
    <script x="701.5517588124999" y="139.00000500000004">
        <block s="reportStringSize">
            <l>world</l>
        </block>
    </script>
</scripts>
</block-definition>
<block-definition s="$robot %'action' behaviours %'primitive'" type="command" category="control">
    <header/>

```

```

<code/>
<translations/>
<inputs>
  <input type="%txt" readonly="true">
    start
    <options>start stop pause resume</options>
  </input>
  <input type="%txt"/>
</inputs>
<script>
  <block s="doDeclareVariables">
    <list>
      <l>all primitives</l>
      <l>keyword list</l>
    </list>
  </block>
  <block s="doSetVar">
    <l>all primitives</l>
    <custom-block s="$robot get %s behaviours">
      <l>all</l>
    </custom-block>
  </block>
  <block s="doSetVar">
    <l>keyword list</l>
    <block s="reportNewList">
      <list>
        <l>start</l>
        <l>stop</l>
        <l>pause</l>
        <l>resume</l>
      </list>
    </block>
  </block>
  <block s="doIfElse">
    <block s="reportNot">
      <block s="reportListContainsItem">
        <block var="all primitives"/>
        <block var="primitive"/>
      </block>
    </block>
    <script>
      <custom-block s="$robot popup %txt">
        <block s="reportJoinWords">
          <list>
            <l>Primitive < </l>
            <block var="primitive"/>
            <l> > is not in the available primitives of your robot : </l>
            <custom-block s="combine with %repRing items of %l">
              <block s="reifyReporter">
                <autolambda>
                  <custom-block s="join words %mult%txt">
                    <list>
                      <l/>
                      <l/>
                    </list>
                  </custom-block>
                </autolambda>
                <list/>
              </block>
              <block var="all primitives"/>
            </custom-block>
          </list>
        </block>
      </block>
    </script>
  </block>
</script>

```

```
        </list>
    </block>
</custom-block>
<block s="doReport">
    <l/>
</block>
</script>
<script>
    <block s="doIfElse">
        <block s="reportNot">
            <block s="reportListContainsItem">
                <block var="keyword list"/>
                <block var="action"/>
            </block>
        </block>
    <script>
        <custom-block s="$robot popup %txt">
            <block s="reportJoinWords">
                <list>
                    <l>Action < </l>
                    <block var="action"/>
                    <l> > is not valid : </l>
                <custom-block s="combine with %repRing items of %l">
                    <block s="reifyReporter">
                        <autolambda>
                            <custom-block s="join words %mult%txt">
                                <list>
                                    <l/>
                                    <l/>
                                </list>
                            </custom-block>
                        </autolambda>
                    <list/>
                </block>
                <block var="keyword list"/>
            </custom-block>
        </list>
    </block>
</custom-block>
<block s="doReport">
    <l/>
</block>
</script>
<script>
    <block s="doReport">
        <block s="reportURL">
            <block s="reportJoinWords">
                <list>
                    <custom-block s="$robot robot URL"/>
                    <l>/primitive/</l>
                    <block var="primitive"/>
                    <l>/</l>
                    <block var="action"/>
                </list>
            </block>
        </block>
    </block>
</script>
</block>
</script>
</block>
```

```

    </script>
</block-definition>
<block-definition s="$robot get %'input' of behaviour %'primitive'" type="reporter" category="sensing">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%s" readonly="true">
            methodes
            <options>methodes properties</options>
        </input>
        <input type="%txt"/>
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>
                <l>all primitives</l>
                <l>keyword list</l>
            </list>
        </block>
        <block s="doSetVar">
            <l>all primitives</l>
            <custom-block s="$robot get %s behaviours">
                <l>all</l>
            </custom-block>
        </block>
        <block s="doSetVar">
            <l>keyword list</l>
            <block s="reportNewList">
                <list>
                    <l>properties</l>
                    <l>methodes</l>
                </list>
            </block>
        </block>
        <block s="doIfElse">
            <block s="reportNot">
                <block s="reportListContainsItem">
                    <block var="all primitives"/>
                    <block var="primitive"/>
                </block>
            </block>
            <script>
                <custom-block s="$robot popup %txt">
                    <block s="reportJoinWords">
                        <list>
                            <l>Primitive </l>
                            <block var="primitive"/>
                            <l> is not in the aivaible primitives of your robot : </l>
                            <custom-block s="combine with %repRing items of %l">
                                <block s="reifyReporter">
                                    <autolambda>
                                        <custom-block s="join words %mult%txt">
                                            <list>
                                                <l/>
                                                <l/>
                                            </list>
                                        </custom-block>
                                    </autolambda>
                                <list/>
                            </custom-block>
                        </list>
                    </block>
                </block>
            </script>
        </block>
    </script>

```

```

        </block>
        <block var="all primitives"/>
    </custom-block>
</list>
</block>
</custom-block>
<block s="doReport">
<l/>
</block>
</script>
<script>
<block s="doIfElse">
<block s="reportNot">
<block s="reportListContainsItem">
<block var="keyword list"/>
<block var="input"/>
</block>
</block>
<script>
<custom-block s="$robot popup %txt">
<block s="reportJoinWords">
<list>
<l>Input </l>
<block var="input"/>
<l> is not valid : </l>
<custom-block s="combine with %repRing items of %l">
<block s="reifyReporter">
<autolambda>
<custom-block s="join words %mult%txt">
<list>
<l/>
<l/>
<l/>
</list>
</custom-block>
</autolambda>
<list/>
</block>
<block var="keyword list"/>
</custom-block>
</list>
</block>
</custom-block>
<block s="doReport">
<l/>
</block>
</script>
<script>
<block s="doReport">
<block s="reportTextSplit">
<block s="reportURL">
<block s="reportJoinWords">
<list>
<custom-block s="$robot robot URL"/>
<l>/primitive/</l>
<block var="primitive"/>
<l>/</l>
<block var="input"/>
</list>
</block>
</block>
<l>/</l>

```

```

        </block>
    </block>
</script>
</block>
</script>
</block>
</script>
</block-definition>
<block-definition s="set $robot host to %'hostname'" type="command"
category="variables">
<header/>
<code/>
<translations/>
<inputs>
<input type="%s"/>
</inputs>
<script>
<block s="doSetVar">
<l>host</l>
<block var="hostname" />
</block>
<block s="doDeclareVariables">
<list>
<l>tmp_hostname</l>
</list>
</block>
<block s="doResetTimer" />
<block s="doUntil">
<block s="reportGreaterThan">
<block s="getTimer" />
<l>10</l>
</block>
<script>
<block s="doSetVar">
<l>tmp_hostname</l>
<block s="reportURL">
<block s="reportJoinWords">
<list>
<custom-block s="$robot robot URL"/>
<l>/ip/</l>
</list>
</block>
</block>
</block>
<block s="doIf">
<block s="reportGreaterThan">
<block s="reportStringSize">
<block var="tmp_hostname" />
</block>
<l>1</l>
</block>
<script>
<block s="doSetVar">
<l>host</l>
<block var="tmp_hostname" />
</block>
<block s="bubble">
<custom-block s="$robot test connection"/>
</block>
<block s="doReport">
<l/>

```

```
        </block>
    </script>
</block>
<block s="doWait">
    <l>0.1</l>
</block>
</script>
</block>
<custom-block s="$robot popup %txt">
    <l>Your robot host is unreacheble</l>
</custom-block>
</script>
</block-definition>
<block-definition s="ping http:// %'url'" type="predicate"
category="operators">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%s" />
    </inputs>
    <script>
        <block s="doResetTimer" />
        <block s="doWaitUntil">
            <block s="reportOr">
                <block s="reportGreaterThan">
                    <block s="getTimer"/>
                    <l>5</l>
                </block>
                <block s="reportGreaterThan">
                    <block s="reportStringSize">
                        <block s="reportURL">
                            <block var="url"/>
                        </block>
                    </block>
                    <l>1</l>
                </block>
            </block>
        </block>
    </block>
</block>
<block s="doIfElse">
    <block s="reportLessThan">
        <block s="getTimer"/>
        <l>5</l>
    </block>
    <script>
        <block s="doReport">
            <block s="reportBoolean">
                <l>
                    <bool>true</bool>
                </l>
            </block>
        </block>
    </script>
    <script>
        <block s="doReport">
            <block s="reportBoolean">
                <l>
                    <bool>false</bool>
                </l>
            </block>
        </block>
    </script>
```

```

        </script>
    </block>
</script>
</block-definition>
<block-definition s="play move %'record_name' | speed x %'speed'" type="command" category="control">
    <comment x="0" y="0" w="230.0000009999988" collapsed="false">Play the movement of a previous recorded move. The <record_name> input is the name of a .record filename which should be in the same directory where you started the web server (with the command "$robot-snap $robot-ergo" for example). You can change the play speed with the <speed> input.
    </comment>
<header/>
<code/>
<translations/>
<inputs>
    <input type="%txt">move_name</input>
    <input type="%n">1</input>
</inputs>
<script>
    <block s="doDeclareVariables">
        <list>
            <l>time</l>
        </list>
    </block>
    <block s="doDeclareVariables">
        <list>
            <l>wait</l>
        </list>
    </block>
    <block s="doSetVar">
        <l>wait</l>
        <block s="reportBoolean">
            <l>
                <bool>true</bool>
            </l>
        </block>
    </block>
    <block s="doIfElse">
        <block s="reportListContainsItem">
            <custom-block s="$robot all recorded moves"/>
            <block var="record_name"/>
        </block>
        <script>
            <block s="doSetVar">
                <l>time</l>
                <block s="reportURL">
                    <block s="reportJoinWords">
                        <list>
                            <custom-block s="$robot robot URL"/>
                            <l>/primitive/MovePlayer/</l>
                            <block var="record_name"/>
                            <l>/start/</l>
                            <block var="speed"/>
                        </list>
                    </block>
                </block>
            </block>
        </block>
        <block s="doIf">
            <block var="wait"/>
        <script>

```

```

        <block s="doWait">
            <block var="time"/>
        </block>
    </script>
    <comment w="90" collapsed="false">ugly wait to stop feature.
    TODO : change with a looking at running primitive</comment>
</block>
</script>
<script>
    <custom-block s="$robot popup %txt">
        <block s="reportJoinWords">
            <list>
                <l>Error : <</l>
                <block var="record_name"/>
                <l>> is not is the avaible records (look at the block $robot
                    all records to see all recorded moves) </l>
                <custom-block s="$robot all recorded moves"/>
            </list>
        </block>
    </custom-block>
</script>
</block>
<block s="doReport">
    <block var="record_name"/>
</block>
</script>
</block-definition>
<block-definition s="$robot set color leds of motor(s) %'motor_name' in
%'color'" type="command" category="control">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%s">motor_name</input>
        <input type="%txt">
            off
            <options>off red green yellow blue pink cyan white</options>
        </input>
    </inputs>
    <script>
        <custom-block s="$robot set %txt of motor(s) %s to %s">
            <l>led</l>
            <block var="motor_name"/>
            <block var="color"/>
        </custom-block>
    </script>
</block-definition>
<block-definition s="$robot card %'card' is detected ?" type="predicate"
category="sensing">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%txt">
            caribou
            <options>caribou tetris lapin</options>
        </input>
    </inputs>
    <script>
        <block s="doDeclareVariables">
            <list>

```

```

        <l>output</l>
    </list>
</block>
<block s="doSetVar">
    <l>output</l>
    <block s="reportURL">
        <block s="reportJoinWords">
            <list>
                <custom-block s="$robot robot URL"/>
                <l>/detect</l>
                <block var="card"/>
            </list>
        </block>
    </block>
</block>
<block s="doIfElse">
    <block s="reportEquals">
        <block var="output"/>
        <l>True</l>
    </block>
    <script>
        <block s="doReport">
            <block s="reportBoolean">
                <l>
                    <bool>true</bool>
                </l>
            </block>
        </block>
    </script>
    <script>
        <block s="doReport">
            <block s="reportBoolean">
                <l>
                    <bool>false</bool>
                </l>
            </block>
        </block>
    </script>
</block>
</script>
</block-definition>
<block-definition s="Leap $flag" type="command" category="other">
    <header/>
    <code/>
    <translations/>
    <inputs/>
    <script>
        <block s="doRun">
            <block s="reportJSFunction">
                <list/>
                <block s="reportURL">
                    <l>crossorigin.me/http://js.leapmotion.com/leap-
                    0.6.4.min.js</l>
                </block>
            </block>
        </list/>
    </block>
    <block s="doRun">
        <block s="reportJSFunction">
            <list/>

```

```

<l>window.controller = new Leap.Controller({enableGestures: true,
background: true}); window.controller.connect();</l>
</block>
<list/>
</block>
</script>
</block-definition>
<block-definition s="Leap number of hands" type="reporter"
category="other">
<header/>
<code/>
<translations/>
<inputs/>
<script>
<block s="doReport">
<block s="evaluate">
<block s="reportJSFunction">
<list/>
<l>return window.controller.frame(0).hands.length;</l>
</block>
<list/>
</block>
</block>
</block>
</script>
</block-definition>
<block-definition s="Leap %'pos' position of hand %'num'"
type="reporter" category="other">
<header/>
<code/>
<translations/>
<inputs>
<input type="%txt">x</input>
<input type="%n">1</input>
</inputs>
<script>
<block s="doDeclareVariables">
<list>
<l>a</l>
</list>
</block>
<block s="doIfElse">
<block s="reportAnd">
<block s="reportListContainsItem">
<block s="reportNewList">
<list>
<l>x</l>
<l>y</l>
<l>z</l>
</list>
</block>
<block var="pos" />
</block>
<block s="reportNot">
<block s="reportGreaterThan">
<block var="num" />
<custom-block s="Leap number of hands"/>
</block>
</block>
</block>
<script>
<block s="doReport">

```

```

<block s="evaluate">
  <block s="reportJSFunction">
    <list>
      <l>pos</l>
      <l>num</l>
    </list>
    <l>var a = {x:0, y:1, z:2}[pos]; return
    window.controller.frame(0).hands[num-
    1].stabilizedPalmPosition[a];</l>
  </block>
  <list>
    <block var="pos"/>
    <block var="num"/>
  </list>
  </block>
</block>
</script>
<script>
  <block s="doReport">
    <l>0</l>
  </block>
</script>
</block>
</script>
</block-definition>
<block-definition s="Leap %'pos' rotation of hand %'num' "
type="reporter" category="other">
  <header/>
  <code/>
  <translations/>
  <inputs>
    <input type="%txt">yaw</input>
    <input type="%n">1</input>
  </inputs>
  <script>
    <block s="doIfElse">
      <block s="reportAnd">
        <block s="reportListContainsItem">
          <block s="reportNewList">
            <list>
              <l>yaw</l>
              <l>pitch</l>
              <l>roll</l>
            </list>
          </block>
          <block var="pos"/>
        </block>
        <block s="reportNot">
          <block s="reportGreaterThan">
            <block var="num"/>
            <custom-block s="Leap number of hands"/>
          </block>
        </block>
      </block>
      <block s="doReport">
        <block s="evaluate">
          <block s="reportJSFunction">
            <list>
              <l>pos</l>
              <l>num</l>
            </list>
          </block>
        </block>
      </block>
    </block>
  </script>

```

```

        </list>
        <l>var f = window.controller.frame(0); switch (pos){ case
        "yaw": return f.hands[num-1].yaw(); case "pitch": return
        f.hands[num-1].pitch(); case "roll": return f.hands[num-
        1].roll(); }; </l>
    </block>
    <list>
        <block var="pos"/>
        <block var="num"/>
    </list>
    </block>
    </block>
</script>
<script>
    <block s="doReport">
        <l>0</l>
    </block>
    </script>
</block>
</script>
</block-definition>
<block-definition s="Leap %'pos' position of finger %'num' "
type="reporter" category="other">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%txt">x</input>
        <input type="%n">1</input>
    </inputs>
    <script>
        <block s="doIfElse">
            <block s="reportAnd">
                <block s="reportListContainsItem">
                    <block s="reportNewList">
                        <list>
                            <l>x</l>
                            <l>y</l>
                            <l>z</l>
                        </list>
                    </block>
                    <block var="pos"/>
                </block>
                <block s="reportNot">
                    <block s="reportGreaterThan">
                        <block var="num"/>
                        <block s="evaluate">
                            <block s="reportJSFunction">
                                <list/>
                                <l>return window.controller.frame(0).fingers.length;</l>
                            </block>
                            <list/>
                        </block>
                    </block>
                </block>
            </block>
        </block>
        <block s="doReport">
            <block s="evaluate">
                <block s="reportJSFunction">
                    <list>

```

```

        <l>pos</l>
        <l>num</l>
    </list>
    <l>var a = {x:0, y:1, z:2}[pos]; return
    window.controller.frame(0).fingers[num-
    1].stabilizedTipPosition[a];</l>
</block>
<list>
    <block var="pos"/>
    <block var="num"/>
</list>
</block>
</block>
</script>
<script>
    <block s="doReport">
        <l>0</l>
    </block>
</script>
</block>
</script>
</block-definition>
<block-definition s="Leap hand %'num' is pinching" type="predicate"
category="other">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%s">1</input>
    </inputs>
    <script>
        <block s="doIfElse">
            <block s="reportNot">
                <block s="reportGreaterThan">
                    <block var="num"/>
                    <custom-block s="Leap number of hands"/>
                </block>
            </block>
            <script>
                <block s="doReport">
                    <block s="reportGreaterThan">
                        <block s="evaluate">
                            <block s="reportJSFunction">
                                <list>
                                    <l>num</l>
                                </list>
                                <l>return window.controller.frame(0).hands[num-
                                1].pinchStrength;</l>
                            </block>
                            <list>
                                <block var="num"/>
                            </list>
                        </block>
                        <l>0.75</l>
                    </block>
                </block>
            </script>
            <block s="doReport">
                <block s="reportBoolean">
                    <l>

```

```

        <bool>false</bool>
    </l>
    </block>
    </block>
    </script>
    </block>
</script>
</block-definition>
<block-definition s="Leap pinch strength of hand %'num'" type="reporter"
category="other">
    <header/>
    <code/>
    <translations/>
    <inputs>
        <input type="%n">1</input>
    </inputs>
    <script>
        <block s="doIfElse">
            <block s="reportNot">
                <block s="reportGreaterThan">
                    <block var="num"/>
                    <custom-block s="Leap number of hands"/>
                </block>
            </block>
            <script>
                <block s="doReport">
                    <block s="reportProduct">
                        <block s="evaluate">
                            <block s="reportJSFunction">
                                <list>
                                    <l>num</l>
                                </list>
                                <l>return window.controller.frame(0).hands[num-
1].pinchStrength;</l>
                            </block>
                            <list>
                                <block var="num"/>
                            </list>
                        </block>
                        <l>100</l>
                    </block>
                </block>
            </script>
            <block s="doReport">
                <l>0</l>
            </block>
        </script>
    </block>
</script>
</block-definition>
<block-definition s="nombre doigts tendus" type="reporter"
category="other">
    <header/>
    <code/>
    <translations/>
    <inputs/>
    <script>
        <block s="doIfElse">
            <block s="reportGreaterThan">
                <custom-block s="Leap number of hands"/>

```

```

        <l>0</l>
    </block>
    <script>
        <block s="doReport">
            <block s="evaluate">
                <block s="reportJSFunction">
                    <list/>
                    <l>var num = 0; for(var f = 0; f <
                        window.controller.frame(0).hands[0].fingers.length; f++){var
                        finger = window.controller.frame(0).hands[0].fingers[f];
                        if(finger.extended) num++;} return num;</l>
                </block>
                <list/>
            </block>
        </block>
        <script>
            <block s="doReport">
                <l>-1</l>
            </block>
        </script>
    </block>
    <script>
        <block s="doIfElse">
            <block s="reportGreaterThanOrEqual">
                <custom-block s="Leap number of hands"/>
                <l>0</l>
            </block>
            <script>
                <block s="doReport">
                    <block s="evaluate">
                        <block s="reportJSFunction">
                            <list>
                                <l>num</l>
                            </list>
                            <l>return window.controller.frame(0).hands[0].fingers[num-
                                1].extended</l>
                        </block>
                        <list>
                            <block var="num"/>
                        </list>
                    </block>
                </block>
            </script>
            <block s="doReport">
                <block s="reportBoolean">
                    <l>
                        <bool>false</bool>
                    </l>
                </block>
            </block>
        </script>
    </script>

```

```

        </block>
    </script>
</block>
</script>
</block-definition>
<block-definition s="initialisation" type="command" category="control">
    <header/>
    <code/>
    <translations/>
    <inputs/>
    <script>
        <custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
            <l>-70</l>
            <l>m5</l>
            <l>1</l>
            <block s="reportBoolean">
                <l>
                    <bool>true</bool>
                </l>
            </block>
        </custom-block>
        <custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
            <l>0</l>
            <l>m6</l>
            <l>1</l>
            <block s="reportBoolean">
                <l>
                    <bool>true</bool>
                </l>
            </block>
        </custom-block>
        <custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
            <l>50</l>
            <l>m3</l>
            <l>1</l>
            <block s="reportBoolean">
                <l>
                    <bool>true</bool>
                </l>
            </block>
        </custom-block>
        <custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
            <l>0</l>
            <l>m4</l>
            <l>2</l>
            <l/>
        </custom-block>
        <custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
            <l>0</l>
            <l>m1</l>
            <l>2</l>
            <l/>
        </custom-block>
        <custom-block s="$robot set position(s) %n of motor(s) %s in %n
seconds | wait ? %boolUE">
            <l>-50</l>

```

```
<l>m2</l>
<l>1</l>
<block s="reportBoolean">
<l>
<bool>true</bool>
</l>
</block>
</custom-block>
<custom-block s="$robot set color leds of motor(s) %s in %txt">
<custom-block s="$robot all motors"/>
<l>off</l>
</custom-block>
<block s="doWait">
<l>1</l>
</block>
<block s="doBroadcast">
<l>moveRobot</l>
</block>
</script>
</block-definition>
</blocks>
<variables>
<variable name="host">
<l>192.168.0.33</l>
</variable>
<variable name="port">
<l>6969</l>
</variable>
<variable name="nbdoigts">
<l>-1</l>
</variable>
<variable name="choix">
<l>0</l>
</variable>
<variable name="humain">
<l>2</l>
</variable>
<variable name="robot">
<l>2</l>
</variable>
<variable name="D">
<list id="3817">
<item>
<list struct="atomic" id="3818">2,3,1</list>
</item>
<item>
<list struct="atomic" id="3819">1,2,3</list>
</item>
<item>
<list struct="atomic" id="3820">3,1,2</list>
</item>
</list>
</variable>
<variable name="gain">
<l>1</l>
</variable>
<variable name="winner">
<list struct="atomic" id="3821">humain,personne,robot</list>
</variable>
<variable name="position">
<list struct="atomic" id="3822">pierre,feuille,ciseaux</list>
```

```
</variable>
<variable name="choix_R">
  <l>feuille</l>
</variable>
<variable name="ang">
  <list struct="atomic" id="3823">110,50,-30</list>
</variable>
</variables>
</project>
```