SIDEBAR 1

#Picaxe 08M2

'C.1 is Eyes Left/Right servo

'C.2 is Eye Up/down servo

'C.4 is is Eye Lid servo

symbol Eyelr = C.1

symbol Eyeud = C.2

symbol Eyelid = C.4

symbol counter = b9

symbol pointer = b8

symbol delay = 10

symbol counter1 = b19

symbol pointer1 = b18

symbol delay1 = 39

symbol counter2 = b25

symbol pointer2 = b24

symbol delay2 = 45

start0:

pause 500

start1:'Eye Lids

let b8=133 'set pointer offset so that Eye Lid loop does not get stuck

let b6=130

let b7=130 'set default center values

servo Eyelid,pointer 'center servo

pause 7500

for counter = 130 to 83 step -1

servopos Eyelid,counter

pause delay

next counter

pause 3000

for counter = 83 to 180 step 1

servopos Eyelid,counter

pause delay

next counter

pause 3000

for counter = 180 to 130 step -1

servopos Eyelid,counter

pause delay

next counter

pause 4000

move: random w3 'place a random number in wo (also B0 & B1)

if b7<83 then left 'check for random down

if b7>=83 and b7<=130 then middle 'check for random middle

if b7>=130 then right

goto move 'keep moving the Eye Lid back to move loop

right: if pointer = 83 then move

if pointer = 130 then mr

for counter = 180 to 83 step -1

servopos Eyelid,counter

pause delay

next counter

pointer = 83

goto skipmr

mr: for counter = 130 to 83 step -1

servopos Eyelid,counter

pause delay

next counter

pointer = 83

skipmr: pause 7000 'delay to look natural

goto move 'return to move loop

middle: if pointer = 130 then move 'if Eye Lid is already in the middle then go back to move

if pointer = 83 then ml

for counter = 180 to 130 step -1

servopos Eyelid,counter

pause delay

next counter

pointer = 130

goto skipml

ml: for counter = 83 to 130 step 1

servopos Eyelid,counter

pause delay

next counter

pointer = 130

skipml: pause 9000 'delay to look natural

goto move 'return to move loop

left: if pointer = 180 then move

if pointer = 83 then lmr

for counter = 130 to 180 step 1

servopos Eyelid,counter

pause delay

next counter

pointer = 180

goto skiplmr

lmr: for counter = 83 to 180 step 1

servopos Eyelid,counter

pause delay

next counter

pointer = 180

skiplmr: pause 7000 'delay to look natural

goto move 'return to move loop

start2:'Eye Left/Right

let b18=153 'set pointer offset so that Eye Left/Right loop does not get stuck

let b16=150

let b17=150 'set default center values

servo Eyelr,pointer1 'center servo

pause 8000

for counter1 = 150 to 125 step -1

servopos Eyelr,counter1

pause delay1

next counter1

pause 3000

for counter1 = 125 to 175 step 1

servopos Eyelr,counter1

pause delay1

next counter1

pause 3000

for counter1 = 175 to 150 step -1

servopos Eyelr,counter1

pause delay1

next counter1

pause 2000

move1: random w8 'place a random number in wo (also B0 & B1)

if b17<125 then left1 'check for random left

if b17>=125 and b17<=150 then middle1 'check for random middle

if b17>=150 then right1

goto move1 'keep moving the Eye Left/Right back to move loop

right1: if pointer1 = 125 then move1

if pointer1 = 150 then mr1

for counter1 = 175 to 125 step -1

servopos Eyelr,counter1

pause delay1

next counter1

pointer1 = 125

goto skipmr1

mr1: for counter1 = 150 to 125 step -1

servopos Eyelr,counter1

pause delay1

next counter1

pointer1 = 125

skipmr1: pause 7000 'delay to look natural

goto move1 'return to move loop

middle1: if pointer1 = 150 then move1 'if Eye left/Right is already in the middle then go back to move

if pointer1 = 115 then ml1 'check to see if Eye is pointed left or right

for counter1 = 175 to 150 step -1

servopos Eyelr,counter1

pause delay1

next counter1

pointer1 = 150

goto skipml1

ml1: for counter1 = 125 to 150 step 1

servopos Eyelr,counter1

pause delay1

next counter1

pointer1 = 150

skipml1: pause 9000 'delay to look natural

goto move1 'return to move loop

left1: if pointer1 = 175 then move1

if pointer1 = 125 then lmr1

for counter1 = 150 to 175 step 1

servopos Eyelr,counter1

pause delay1

next counter1

pointer1 = 175

goto skiplmr1

lmr1: for counter1 = 125 to 175 step 1

servopos Eyelr,counter1

pause delay1

next counter1

pointer1 = 175

skiplmr1: pause 7000 'delay to look natural

goto move1 'return to move loop

start3: 'Eye Up/Down

let b24=153 'set pointer offset so that Eye Up/Down loop does not get stuck

let b22=150

let b23=150 'set default center values

servo Eyeud,pointer2 'center servo

pause 9500

for counter2 = 150 to 120 step -1 'move Eye from middle to up

servopos Eyeud,counter2

pause delay2

next counter2

pause 3000

for counter2 = 120 to 200 step 1

servopos Eyeud,counter2 'move Eye from up to down

pause delay2

next counter2

pause 3000

for counter2 = 200 to 150 step -1

servopos Eyeud,counter2 'move Eye from down to middle

pause delay2

next counter2

pause 4000

move2: random w11 'place a random number in wo (also B0 & B1)

if b23<120 then left2 'check for random up

if b23>=120 and b23<=150 then middle2 'check for random middle

if b23>=150 then right2 'check for random down

goto move2 'keep moving the Eye back to move loop

right2: if pointer2 = 120 then move2 'if Eye is already down goto back to move

if pointer2 = 150 then mr2 'check to see if Eye in pointed middle or up

for counter2 = 200 to 120 step -1 'move Eye from up to down

servopos Eyeud,counter2

pause delay2

next counter2

pointer2 = 120 'set Eye pointer direction to down

goto skipmr2

mr2: for counter2 = 150 to 120 step -1 'move Eye from middle to down

servopos Eyeud,counter2

pause delay2

next counter2

pointer2 = 120 'set Eye pointer direction to down

skipmr2: pause 7000 'delay to look natural

goto move2 'return to move loop

middle2: if pointer2 = 150 then move2 'if Eye is already in the middle then go back to move

if pointer2 = 120 then ml2 'check to see if head is pointed up or down

for counter2 = 200 to 150 step -1

servopos Eyeud,counter2 'move Eye from down to middle

pause delay2

next counter2

pointer2 = 150

goto skipml2

ml2: for counter2 = 120 to 150 step 1

servopos Eyeud,counter2 'move servo from left to middle

pause delay2

next counter2

pointer2 = 150

skipml2: pause 9000 'delay to look natural

goto move2 'return to move loop

left2: if pointer2 = 200 then move2 'if head is already left then return to move

if pointer2 = 120 then lmr2 'check if the head is in the middle or the right

for counter2 = 150 to 200 step 1

servopos Eyeud,counter2 'move head from middle to left

pause delay2

next counter2

pointer2 = 200

goto skiplmr2

lmr2: for counter2 = 120 to 200 step 1

servopos Eyeud,counter2 'move head from right to left

pause delay2

next counter2

pointer2 = 200

skiplmr2: pause 7000 'delay to look natural

goto move2 'return to move loop