

Sandbox | CMU CS Academy

```
1  #background
2  Rect(0, 0, 400, 400, fill='skyblue')
3  #obstacle
4  Rect(0, 340, 400, 400)
5  Rect(340, 240, 90, 400)
6
7  obstacle = Rect(220, 325, 50, 20, fill=gradient('black', 'black', 'brown', start='bottom'))
8
9
10 #direction
11 Rect(140, 285, 45, 30, fill='grey')
12 Line(162, 315, 162, 340)
13 Line(145, 310, 180, 290, arrowEnd=True)
14
15 #zombies
16 def stickZombies(zombies, start):
17
18     for i in range(4):
19         zombies.add(Line(24+15*i, 265, 24+15*i, 315, fill='black'),
20                        Circle(24+15*i, 265, 14),
21                        Line(24+15*i, 315, 42+15*i, 340),
22                        Line(24+15*i, 315, 10+15*i, 340),
23                        Line(24+15*i, 293, 49+15*i, 281),
24                        Line(24+15*i, 296, 50+15*i, 286))
25
26 runningZombies=Group(Label('Agh! Brains...', 55, 245))
27 stickZombies(runningZombies, 24)
28
29
30
31 #person
32 def personRunning(person, start):
33     person.add(Line(start, 265, start, 315, fill='black'),
34                Circle(start, 265, 14),
35                Line(start, 315, 150, 340),
36                Line(start, 315, 118, 340),
37                Line(start, 293, 160, 281),
38                Line(start, 296, 163, 286))
39
40
41 runPerson=Group()
42 personRunning(runPerson, 130)
43
44
45
46 #controlling the movement of zombies and person
47 def onStep():
48     for i in runningZombies.children:
49         i.centerX+=1
50         if runningZombies.centerX>=310:
51             runningZombies.centerX=310
52
53     runPerson.centerX+=2
54
55     if runPerson.centerX>=230:
56         runPerson.centerY-=2
57
58     if runPerson.centerY<=200:
59         runPerson.centerY=200
```