Sandbox | CMU CS Academy

```
0.00
 1
 2
 3
   Author:
                     Muhammad Anees Khan
   Created:
                     04/16/2021
 5
                     Red ball is moving through key inputs and when the red ball touches the coin
   Description:
 6
 7
 8
 9
10 #Background
11 app.background=gradient('deepSkyBlue', 'skyBlue', start='top-left')
12 #theGround
13
    Ground = Line(0, 388, 400, 388, fill='limeGreen', lineWidth=60)
14
    #Coin
15 coin= Circle(200,308,10, fill='gold')
16 Label('C', 200, 308, fill='black', size= 15)
17
   #Ball
18 ball= Circle(40, 358, 20, fill='firebrick')
19
    #BallFace
20 Eye = Circle(48, 354, 6, fill='White', border='black', borderWidth=1)
21 Pupil = Circle(48, 354, 2, fill='black', border='black', borderWidth=1)
22 Eye2 = Circle(32,354, 6, fill='white', border='black', borderWidth=1)
23 Pupil2 = Circle(32,354, 2, fill='black', border='black', borderWidth=1)
24
   #Clouds
25 Circle(68, 104, 30, fill='White')
26 Circle(96, 71, 30, fill='White')
27 Circle(119, 111, 30, fill='White')
28 Circle(145, 70, 30, fill='White')
29 Circle(166, 110, 30, fill='White')
30 Circle(266, 71, 30, fill='White')
31 Circle(305, 41, 30, fill='White')
32 Circle(351, 63, 30, fill='White')
33 Circle(309, 87, 30, fill='White')
34 #Label
35 s2 = Label('Click to begin', 200,200, visible=True)
36 coinlabel= Label('You Got It!', 200, 200, visible=False)
37 s = Label('Controls: Up, Right, and Left', 200,215, visible=False)
38 #Tree
39
40
41
42 def onMousePress(mouseX, mouseY):
43
        s.visible=True
44
        s2.visible=False
45
46 def onKeyPress(key):
47
        if key == 'right':
48
             s.visible=False
49
            ball.centerX +=10
50
             Eye.centerX +=10
51
             Pupil.centerX +=10
             Eye2.centerX +=10
52
53
             Pupil2.centerX +=10
54
        elif key=='left':
55
            ball.centerX-=10
56
             Eye.centerX-=10
57
            Pupil.centerX -=10
58
             Eye2.centerX-=10
59
             Pupil2.centerX -=10
        elif key=='up':
60
61
            s.visible=False
62
            ball.centerY-=50
63
            Eye.centerY-=50
64
             Pupil.centerY -=50
65
             Eye2.centerY-=50
             Pupil2.centerY -=50
66
        else:
67
68
             s.visible=True
69
70
        if s2.visible==True:
71
             coinlabel.visible=False
72
        elif ball.hitsShape(coin)==True:
73
             coinlabel.visible=True
```

```
74
            app.stop()
75
76
77
78
   def onKeyRelease(key):
79
        if key == 'right':
80
           ball.centerX+=10
81
            Eye.centerX+=10
82
            Pupil.centerX +=10
83
            Eye2.centerX+=10
84
            Pupil2.centerX +=10
85
        elif key=='left':
86
            ball.centerX -=10
87
            Eye.centerX -=10
88
            Pupil.centerX -=10
89
            Eye2.centerX -=10
90
            Pupil2.centerX -=10
91
        elif key=='up':
            ball.centerY+=50
92
93
            Eye.centerY += 50
94
            Pupil.centerY +=50
95
            Eye2.centerY+=50
96
            Pupil2.centerY +=50
97
        else:
98
            s.visible=True
```