

```
1  var player;
2  var PLAYER_SIZE = 30;
3  var x = 8;
4  var y = 0;
5  var leftWall;
6  var rightWall;
7  var runs = -1;
8  var maxRuns = 5;
9
10 function start(){
11     player = new Rectangle(PLAYER_SIZE, PLAYER_SIZE);
12     player.setColor(Color.green);
13     player.setPosition(50, 50);
14     add(player);
15     rectColor(5, getHeight(), Color.red, 0, 0);
16     rectColor(5, getHeight(), Color.red, getWidth()-5, 0);
17     leftWall = getElementAt(0, 0);
18     rightWall = getElementAt(getWidth(), 0);
19     obs();
20     setTimer(move, 50);
21 }
22
23 function move(){
24     keyDownMethod(direction);
25     var elemLeft = getElementAt(player.getX() - 1, player.getY() + PLAYER_SIZE/2);
26     var elemRight = getElementAt(player.getX() + PLAYER_SIZE + 1, player.getY() + PLAYER_SIZE/2);
27     var elemBottom = getElementAt(player.getX() + PLAYER_SIZE/2, player.getY() + PLAYER_SIZE);
28     if(elemLeft == null && elemRight == null){
29         player.move(x, y);
30     }else{
31         if(elemLeft == leftWall || elemRight == rightWall){
32             gameOver(false);
33         }
34     }
35     gravity();
36     if(player.getX() > getWidth()){
37         player.setPosition(getWidth() - PLAYER_SIZE - 1, player.getY());
38         x = 0;
39     }
40     if(player.getX() < 0){
41         player.setPosition(0 + PLAYER_SIZE + 1, player.getY());
42         x = 0;
43     }
44     if(player.getY() + PLAYER_SIZE >= getHeight()){
45         player.setPosition(player.getX(), 0);
46         for(var i = 1; i <= 4; i++){
47             var elemLeft = getElementAt(0, i*100);
48             remove(elemLeft);
49             var elemRight = getElementAt(getWidth(), i*100);
50             remove(elemRight);
51         }
52         obs();
53     }
```

```
54 }
55
56 function gravity(){
57     var elemLeft = getElementAt(player.getX(), player.getY() + PLAYER_SIZE+1);
58     var elemRight = getElementAt(player.getX() + PLAYER_SIZE, player.getY() + PLAYER_SIZE+1);
59     if(elemLeft == null && elemRight == null){
60         player.move(0, 10);
61     }
62 }
63
64 function direction(e){
65     if(e.keyCode == Keyboard.LEFT){
66         x = -8;
67     }
68     if(e.keyCode == Keyboard.RIGHT){
69         x = 8;
70     }
71 }
72
73 function obs(){
74     for(var i = 1; i <= 4; i++){
75         var leftLength = Randomizer.nextInt(0, getWidth() - PLAYER_SIZE*2);
76         var leftWall = new Rectangle(leftLength, 5);
77         var rightLength = getWidth() - (leftLength + PLAYER_SIZE*2);
78         var rightWall = new Rectangle(rightLength, 5);
79         rect(leftLength, 5, 0, i*100);
80         rect(rightLength, 5, leftLength + PLAYER_SIZE*2, i*100);
81     }
82     runs++;
83     if(runs == maxRuns){
84         gameOver(true);
85     }
86 }
87
88 function gameOver( beaten ){
89     if( beaten == true ){
90         stopTimer(move);
91         rectColor(getWidth(), getHeight(), Color.green, 0, 0);
92         text("You Won!", "50pt Arial", getWidth()/2 - 150, getHeight()/2, Color.white);
93     }else{
94         stopTimer(move);
95         rect(getWidth(), getHeight(), 0, 0);
96         text("You Lose!", "50pt Arial", getWidth()/2 - 150, getHeight()/2, Color.white);
97     }
98 }
99 function text(label, font, x, y, color){
100     var txt = new Text(label, font);
101     txt.setPosition(x, y);
102     txt.setColor(color);
103     add(txt);
104 }
105 function rectColor(length, width, color, x, y){
106     var rect = new Rectangle(length, width);
107     rect.setColor(color);
108     rect.setPosition(x, y);
109     add(rect);
```

```
110 | }  
111 | function rect(length, width, x, y){  
112 |     var rect = new Rectangle(length, width);  
113 |     rect.setPosition(x, y);  
114 |     add(rect);  
115 | }
```

---

PDF document made with CodePrint using [Prism](#)