```html
1  <!DOCTYPE html>
2
3  <html lang="en" xmlns="http://www.w3.org/1999/xhtml">
4  <head>
5      <meta charset="utf-8" />
6      <title>Invader Chase</title>
7
8      <script language="javascript">
9          var onoff = 0 * 1;
10         var leftright = 0 * 1;
11         var xcoord = Math.floor(Math.random() * 480)
12         var ycoord = 430;
13         var xcoord2 = xcoord - 20;
14         var xcoord3 = xcoord + 20;
15
16
17         function paintcanvas() {
18
19             //paint character
20             var c = document.getElementById("mycanvas");
21             var ctx = c.getContext("2d");
22
23
24             ctx.canvas.width = 600;
25             ctx.canvas.height = 500;
26             //paint canvas
27             ctx.fillStyle = "#000000";
28             ctx.fillRect(0, 0, window.innerWidth, window.innerHeight);
29
30
31
32             ctx.fillStyle = "#00ccff";
33             ctx.beginPath();
34             ctx.rect(xcoord, ycoord - 5, 20, 15);
35             ctx.stroke();
36             ctx.fill();
37
38             ctx.fillStyle = "#ffcc00";
39             ctx.beginPath();
40             ctx.rect(xcoord2, ycoord + 25, 20, 35);
41             ctx.stroke();
42             ctx.fill();
43
44             ctx.fillStyle = "#ffcc00";
45             ctx.beginPath();
46             ctx.rect(xcoord3, ycoord + 25, 20, 20);
47             ctx.stroke();
48             ctx.fill();
49
50             ctx.fillStyle = "#696969";
51             ctx.beginPath();
52             ctx.rect(xcoord - 20, ycoord + 10, 60, 20); //square:(x location, y
```

```
               location, length, height)
53             ctx.stroke();
54             ctx.fill();
55         }
56
57
58
59
60
61
62         function move() {
63             var c = document.getElementById("mycanvas");
64             var ctx = c.getContext("2d");
65             var leftright = Math.floor(Math.random() * 2);
66             if (leftright == 0) {
67                 xcoord += 20;
68                 ycoord -= 10;
69
70                 xcoord2 = xcoord - 20;
71                 xcoord3 = xcoord + 20;
72             }
73             else if (leftright == 1) {
74                 xcoord -= 20;
75                 ycoord -= 10;
76
77                 xcoord2 = xcoord + 20;
78                 xcoord3 = xcoord - 20;
79             }
80
81             if (ycoord <= 0) {
82                 onoff = 0 * 1;
83                 xcoord = Math.floor(Math.random() * 480);
84                 ycoord = 430;
85                 window.clearInterval(timer);
86                 alert("You won!");
87             }
88
89             if (xcoord <= 15) {
90                 xcoord += 20;
91             }
92
93             if (xcoord >= 560) {
94                 xcoord -= 20;
95             }
96
97
98
99
100            paintcanvas();
101        }
102
103        function starttimer() {
```

```
104                 if (onoff == 0) {
105                     timer = setInterval("move()", 500)
106                     onoff = 1 * 1;
107                 }
108
109                 else if (onoff == 1) {
110                     clearInterval(timer);
111                     onoff = 0 * 1;
112                 }
113             }
114         </script>
115 </head>
116 <body onload="paintcanvas()" style="background-color: #808080; background-image: ↵
        url('background.jpg');">
117     <center>
118         <h1 style="font-family:Impact; font-size:48px; color:red; outline-        ↵
            style:solid; outline-color:black; background-color:black;">Invader     ↵
            Chase</h1>
119         <canvas id="mycanvas" width="500"
120                 style="border:1px solid rgb(195, 195, 195);">
121             Your browser does not support the canvas element
122         </canvas>
123         </br>
124         </br>
125         <input type="button" name="auto" value="Animate" style="font-          ↵
            family:Montserrat; font-size:20px; color:red; background-color:black;"
126                 onclick="starttimer()" />
127         <input type="button" name="move" value="Move" style="font-            ↵
            family:Montserrat; font-size:20px; color:red; background-color:black;"
128                 onclick="move()" />
129     </center>
130
131 </body>
132 </html>
```