```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>Pong</title>
7      <script language="javascript">
8          var onoff = 0 * 1;
9          var x = 180;
10         var y = 700;
11         var x2 = 180;
12         var y2 = 70;
13         var ballx = 350;
14         var bally = 650;
15         var movex = 10;
16         var movey = 10;
17         var score = 0 * 1;
18         var scorecpu = 0 * 1;
19         var movecpu = 1 * 10;
20         var speed = 100 * 1;
21
22
23         function move() {
24             bally -= movey;
25             ballx += movex;
26             //red board boundaries
27             if (bally < 0) {
28                 starttimer();
29                 ballx = (x + 170);
30                 bally = 650;
31                 movey = -10;
32                 speed = 100;
33                 score += 1; //player score
34                 document.getElementById("outputfield1").innerHTML = score;
35             }
36             if (bally > 750) {
37                 starttimer();
38                 ballx = (x + 170);
39                 bally = 650;
40                 movey = -10;
41                 speed = 100;
42                 scorecpu += 1; //AI score
43                 document.getElementById("outputfield2").innerHTML = scorecpu;
44             }
45             if (bally < (y2 + 50) && (ballx > x2 && ballx < x2 + 350)) {
46                 movey *= -1;
47                 movex *= 1;
48                 //ball richochet
49
50                 speed -= 5;
51
52
```

```
53              }
54
55
56              if (bally > (y - 20) && (ballx > x && ballx < x + 350)) {
57                  movey *= -1;
58                  movex *= 1;
59
60                  //ball richochet
61
62                  speed -= 5;
63
64
65              }
66
67              //bounce off the walls
68              if (ballx >= 670) {
69                  movex += -10;
70              }
71              else if (ballx <= 30) {
72                  movex += 10;
73              }
74
75              //track the ball
76              if (ballx < x2) {
77                  x2 -= 15;
78              }
79              else if (ballx > x2 + 350) {
80                  x2 += 15;
81              }
82              draw();
83          }
84
85      function starttimer() {
86          if (onoff == 0) {
87              timer = setInterval("move()", speed);
88              onoff = 1 * 1;
89          }
90          else if (onoff == 1) {
91              clearInterval(timer);
92              onoff = 0 * 1;
93          }
94
95      }
96      function draw() {
97          canvas = document.getElementById("canvas");
98          ctx = canvas.getContext("2d");
99          ctx.canvas.width = 700;
100         ctx.canvas.height = 800;
101         //pick background fill color
102         ctx.fillStyle = "#000000";
103         ctx.fillRect(0, 0, 700, 800);
104
```

```
105              //cpu board
106              ctx.fillStyle = "#ff0000";
107              ctx.beginPath();
108              ctx.rect(x2, y2, 350, 20);
109              ctx.stroke();
110              ctx.fill();
111
112              //p1 board
113              ctx.fillStyle = "#0000ff";
114              ctx.beginPath();
115              ctx.rect(x, y, 350, 20);
116              ctx.stroke();
117              ctx.fill();
118
119              if (onoff == 1) {
120                  //draw ball
121                  ctx.fillStyle = "#888888";
122                  ctx.beginPath();
123                  ctx.arc(ballx, bally, 15, 0, Math.PI * 2, true);
124                  ctx.closePath();
125                  ctx.fill();
126              }
127
128
129          }
130
131      function init() {
132          window.addEventListener('keydown', dokeydown, true)
133          draw();
134      }
135
136      function dokeydown(evt) {
137
138          switch (evt.which) {
139              //left arrow
140              case 37:
141                  x -= 10;
142                  break;
143              //right arrow
144              case 39:
145                  x += 10;
146                  break;
147          }
148          if (onoff == 0) {
149              ballx = (x + 170);
150              bally = 750;
151          }
152          draw();
153      }
154
155
156  </script>
```

```
157  </head>
158  <body onload="init()">
159      <center>
160          <canvas id="canvas" width="300" height="200">
161              This text is displayed if your browser does not support HTML5 Canvas.
162          </canvas>
163          <input type="button" value="play" onclick="starttimer()" />
164          </br>
165          <form name="outputform" class="output">
166              <u>PLAYER</u>
167              </br>
168              <textarea name="txaoutputfield" id="outputfield1" rows="5" cols="5"   ⏎
                     disabled></textarea>
169          </form>
170
171          <form name="outputform2" class="output">
172              <u class="text">CPU</u>
173              </br>
174              <textarea name="txaoutputfield" id="outputfield2" rows="5" cols="5"   ⏎
                     disabled></textarea>
175          </form>
176      </center>
177  </body>
178  </html>
```