

```
1  int xPos;                //Position of the ball
2  int speed = 1;           //How fast is it moving?
3  int xDir = 1;            //what direction is the ball going?
4
5  int score = 0;           //Inital score
6  int lives = 5;           //Number of lives you start with
7  boolean lost = false;    //Have you lost yet?
8
9  void setup()             //Runs once when program launches
10 {
11     size(400, 400);       //Size of main screen
12     smooth();             //Smooth geometry
13     xPos = width / 2;     //Centers our ball
14     fill(0, 255, 0);      //Makes the ball and text green
15     textSize(13);         //Sets the size of our text
16     System.out.println("HelloWorld");
17 }
18
19 void draw()               //Loops over and over again
20 {
21     background(0, 0, 0);  //Black background
22     ellipse(xPos, height/2, 40, 40); //Draw the ball
23     xPos = xPos + (speed * xDir); //update the ball's position
24     if (xPos > (width - 20) || xPos < 20) //Did the ball hit the side?
25     {
26         xDir = -xDir;      //If it did reverse the direction
27         print("Direction ");
28         println(xDir);
29     }
30     text("score = " + score, 10, 10); //Print the score on the screen
```

```
31  text("lives = " + lives, width-80, 10);           //Print remaining lives
32  if (lives <= 0)                                     //Check to see if you lost
33  {
34      textSize(20);
35      text("Click to Restart", 125, 100);
36      noLoop();                                       //Stop looping at the end of the draw function
37      lost = true;
38      textSize(13);
39  }
40 }
41
42 void mousePressed()                                //Runs whenever the mouse is pressed
43 {
44     if (dist(mouseX, mouseY, xPos, 200) <= 20)    //Did we hit the target?
45     {
46         score = score + speed;                     //Increase the speed
47         speed = speed + 1;                          //Increase the Score
48         print("Speed ");
49         println(speed);
50         print("Score ");
51         println(score);
52     }
53     else                                           //We missed
54     {
55         lives=lives-1;                             //Take away one life
56     }
57
58     if (lost == true)                             //If we lost the game, reset now and start over
59     {
60         speed = 1;                                 //Reset all variables to initial conditions
```

```
61     lives = 5;
62     score = 0;
63     xPos = width/2;
64     xDir = 1;
65     lost = false;
66     loop();                                //Begin looping draw function again
67 }
68 }
69
70
```