```
1
2  // Example 5-8: Square following edge, uses a "state" variable
3
4  int x = 0;  // x location of square
5  int y = 0;  // y location of square
6
7  int speed = 5;  // speed of square
8
9  // A variable to keep track of the square's "state."
10 // Depending on the value of its state, it will either move ri
11 int state = 0;
12
13 void setup() {
14   size(640,360);
15 }
16
17 void draw() {
18   background(255);
19
20   // Display the square
21   stroke(0);
22   fill(y,0,0);
23   rect(x,y,9,9);
24
25   // If the state is 0, move to the right.
26   if (state == 0) {
27     x = x + speed;
28     // If, while the state is 0, it reaches the right side of
29     // Repeat this same logic for all states!?
30     if (x > width-10) {
31       x = width-10;
32       state = 1;
33     }
34   } else if (state == 1) {
35     y = y + speed;
36     if (y > height-10) {
37       y = height-10;
38       state = 2;
39     }
40   } else if (state == 2) {
```

```
    x = x - speed;
    if (x < 0) {
      x = 0;
      state = 3;
    }
  } else if (state == 3) {
    y = y - speed;
    if (y < 0) {
      y = 0;
      state=0;
    }
  }
}
```