

```
1 // your javadoc header goes here
2
3 import java.util. Random;
4
5 public class Fish
6 {
7     private int myId;
8     private int myX;
9     private int myY;
10    private int myDirection; // 1 is North, 2 is East, 3 is South, 4 is West
11    private static Random myRandom = new Random ();
12    private static int currentIdNum = 1;
13
14    // default constructor
15    public Fish ()
16    {
17        // implement this default constructor so that
18        // each fish obtains a unique integer id number (myId),
19        // the fish starts in the location (0, 0), &
20        // the fish has an initial direction of East
21    }
22
23    public void move ()
24    {
25        // In Ch7Proj1, you must implement this method according to the specs.
26    }
27
28    public String toString ()
29    {
30        String stringDirxn;
31
32        switch (myDirection )
33        {
34            case 1:
35                stringDirxn = "North";
36                break;
37            case 2:
38                stringDirxn = "East";
39                break;
40            case 3:
41                stringDirxn = "South";
42                break;
43            case 4:
44                stringDirxn = "West";
45                break;
46            default:
47                stringDirxn = "Something illegal happened. See the
programmer. ";
48                break;
49        }
50
51        return myId + ": (" + myX + ", " + myY + ") " + stringDirxn;
52    }
53 }
```