

Class Driver09

1/2

```
1 import edu.fcps.Turtle;
2 import java.awt.Color;
3 import javax.swing.*;
4 import java.lang.*;
5 /**
6  * Driver09 creates a JFrame and draws a square, octagon, flower, and spirals inside
7  * This is an example of polymorphism because all the classes used to draw extend and override methods in abstract class Turtle
8  *
9  * @author Nathan Chen
10 * @author Benjamin Tu
11 * @version 10-15-18
12 * @period 2
13 * @teacher Coglianese
14 */
15 public class Driver09
16 {
17     /**
18      * Main is the main method called when is called to run
19      */
20     public static void main(String[] args)
21     {
22         JFrame frame = new JFrame("Lab09");
23         frame.setSize(800, 800);
24         frame.setLocation(200, 100);
25         frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
26         frame.setContentPane(new TurtlePanel());
27         frame.setVisible(true);
28         frame.getContentPane().setBackground(Color.WHITE);
29
30         SquareTurtle s = new SquareTurtle();
31         PolygonTurtle p = new PolygonTurtle(10.0, 8);
32         FlowerTurtle f = new FlowerTurtle();
33         TwistyTurtle t = new TwistyTurtle();
34         TwistyTurtle2 tt = new TwistyTurtle2();
35         TwistyTurtle3 ttt = new TwistyTurtle3();
36
37         twisties(s);
38         twisties(p);
39         twisties(f);
40         twisties(t);
41         twisties(tt);
42         twisties(ttt);
43     }
44
45     /**
46      * Twisties takes a Turtle and moves it somewhere random before running it in a thread
47  }
```

Class Driver09 (continued)

2/2

```
47     */
48     public static void twisties(Turtle arg)
49     {
50         arg.setPenDown(false);
51         arg.turnRight((int)(Math.random() * 360));
52         arg.forward((int)(Math.random() * 200));
53         arg.setPenDown(true);
54         (new Thread((Runnable)arg)).start();
55     }
56 }
```