

Selected files

2 printable files

Question_5\b)\CircularSpiral.java
Question_5\b)\CircularSpiralTest.java

Question_5\b)\CircularSpiral.java

```
1 import javax.swing.JPanel;
2 import java.awt.Graphics;
3
4 public class CircularSpiral extends JPanel {
5
6     public void paintComponent(Graphics g) {
7         int x = getSize().width / 2 - 10;
8         int y = getSize().height / 2 - 10;
9         int width = 20;
10        int height = 20;
11        int startAngle = 0;
12        int arcAngle = 180;
13        int depth = 10;
14        for (int i = 0; i < 10; i++) {
15            if (i % 2 == 0) {
16                // g.drawArc(x + 10, y + 10, width, height, startAngle + 10, -arcAngle);
17                // x = x - 5;
18                y = y - depth;
19                width = width + 2 * depth;
20                height = height + 2 * depth;
21                g.drawArc(x, y, width, height, startAngle, -arcAngle);
22            } else {
23                // g.drawArc(x + 10, y + 10, width, height, startAngle + 10, arcAngle);
24                x = x - 2 * depth;
25                y = y - depth;
26                width = width + 2 * depth;
27                height = height + 2 * depth;
28                g.drawArc(x, y, width, height, startAngle, arcAngle);
29            }
30        }
31    }
32 }
```

Question_5\b)\CircularSpiralTest.java

```
1 import javax.swing.JFrame;
2
3 public class CircularSpiralTest {
4     public static void main(String[] args) {
5
6         //create a panel that contains our drawing
7         CircularSpiral Circularpanel = new CircularSpiral();
8
9         //create a new frame to hold the panel
10        JFrame application = new JFrame();
11
12        //set the frame to exit when it is closed
13        application.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
14
15        application.add(Circularpanel); //add the panel to the frame
```

```
16 |         application.setSize(400, 400);
17 |         application.setVisible(true);
18 |     }
19 | }
20 |
```