```java
 1 import java.awt.BasicStroke;
11
12 public class DrawShapeTest extends Canvas
13 {
14     public DrawShapeTest()
15     {setBackground(Color.WHITE);}
16
17
18     public void paint(Graphics g)
19     {
20         int centerX = getWidth()/2;
21         int centerY = getHeight()/2;
22
23
24         int[] x = {400,400,490,490,563,563};
25         int[] y = {250,250,310,310,345,345};
26
27         Color[] colors =
   {Color.decode("#F5DEB3"),Color.decode("#A1CE41"),
28                 Color.decode("#A0522D"), Color.decode("#B0E0E6"),
29                 Color.decode("#FFA500"),Color.decode("#D8BFD8")};
30
31         int[] width = {600,600,422,422,280,280};
32         int[] height = {400,400,280,280,210,210};
33
34         Shape[] shapes = new Shape[] {   new Rectangle(), //light brown
   rectangle
35                 new Oval(), //green oval
36                 new Rectangle(), //brown rectangle
37                 new Oval(), //cyan oval
38                 new Rectangle(), //light orange rectangle
39                 new Oval() //puple oval
40                 };
41
42
43         for(int i = 0; i <shapes.length; i++)
44         {
45             shapes[i].setColor(colors[i]);
46             shapes[i].setWidth(width[i]);
47             shapes[i].setHeight(height[i]);
48             shapes[i].moveTo(x[i], y[i]);
```

```
49              shapes[i].draw(g);
50
51          }
52
53
54          //displays a text
55          g.setColor(Color.BLACK);
56
57          Graphics2D g2 = (Graphics2D) g;
58          g2.setStroke(new BasicStroke(3));
59
60          g2.drawString("Excercise 2 by Eftekher Husain", centerX-100,
     centerY);
61
62          //displays rectangle around the shapes
63          g2.drawRect(120, 50, 1200, 800);
64
65          //draws a line on top of shapes
66          g2.setStroke(new BasicStroke(1));
67          g.drawLine(120, 50, 1320, 850);
68
69      }
70
71      public static void main(String[] args) {
72
73
74          JFrame frame = new JFrame("Excercise 2 By Eftekher Husain");
75          DrawShapeTest drawShapes = new DrawShapeTest();
76
77
78          frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
79
80          frame.add(drawShapes);
81
82          frame.setSize(1500, 1000);
83          frame.setVisible(true);
84      }
85 }
86
```