

StopLight.java

```
1  import java.awt.*;
2  import java.awt.event.*;
3  import java.applet.*;

4  public class StopLight extends Applet {

5      public void init() {
6          setBackground(new Color(0xCC, 0x66, 0x00));
7          button.addActionListener(new ButtonHandler());
8          add(button);
9      }

10     public void paint(Graphics g) {
11         g.setColor(Color.black);
12         g.fillRect(100, 50, 100, 200);
13         g.setColor(Color.lightGray.brighter());
14         g.fillRect(115, 65, 70, 170);
15         circle(g, (nState == 0) ? Color.red      : Color.red.darker().darker(),    150, 100);
16         circle(g, (nState == 1) ? Color.orange   : Color.orange.darker().darker(), 150, 150);
17         circle(g, (nState == 2) ? Color.green    : Color.green.darker().darker(),  150, 200);
18     }

19     private void circle(Graphics g, Color c, int nX, int nY) {
20         final int nR = 20, nR2 = 2 * nR;
21         g.setColor(c);
22         g.fillOval(nX - nR, nY - nR, nR2, nR2);
23         g.setColor(Color.black);
24         g.drawOval(nX - nR, nY - nR, nR2, nR2);
25     }

26     private class ButtonHandler implements ActionListener {
27         public void actionPerformed(ActionEvent e) {
28             if (++nState > 2)
29                 nState = 0;
30             repaint();
31         }
32     }

33     private Button button = new Button("Click Me");
34     private int nState = 0;
35
36 }
```

