Artificial Intelligence and Data Science Department.
OOPM / Odd Sem 2021-22 / Experiment 14.

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EXPERIMENT - 14.

Aim: To demonstrate the graphics font and Color class in java.

Theory: The Graphics class is the abstract superclass for all graphics contexts which allows an application to draw onto components that can be realized on various devices, or onto off-screen images as well.

PART: 01 House import

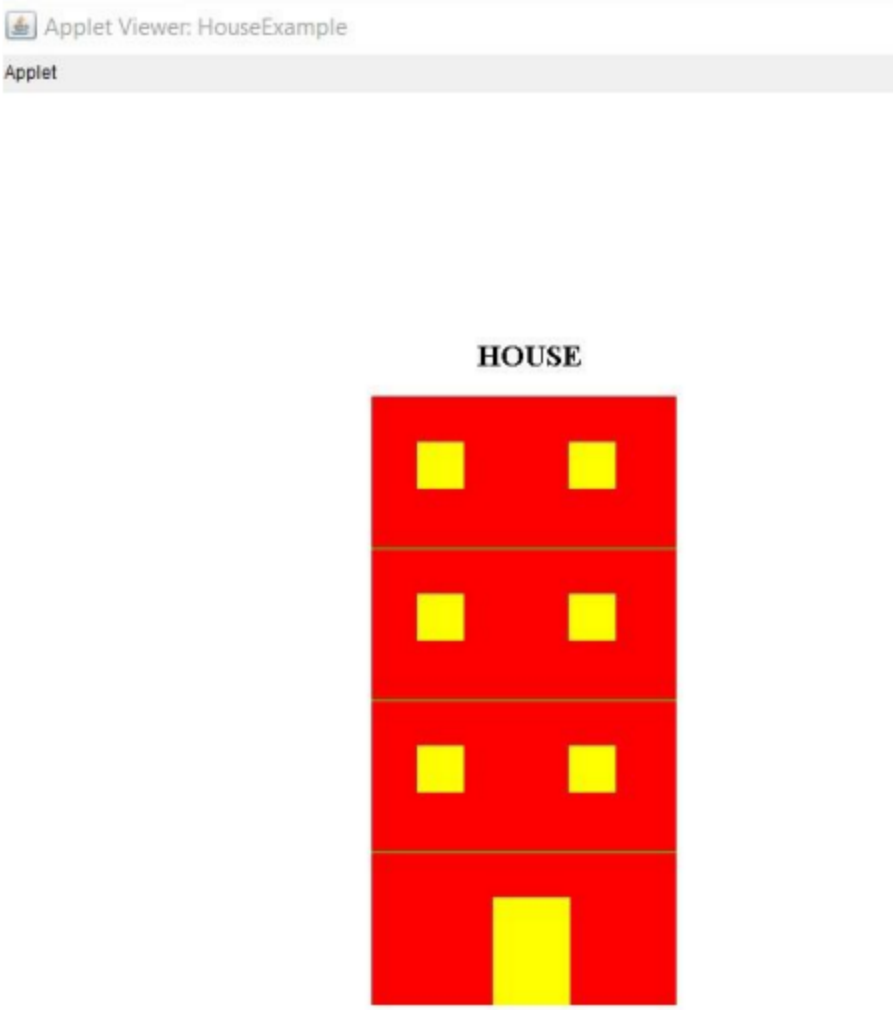
Program:

```
java.applet.Applet;
import
java.awt.Graphics;
import java.awt.Font;
import java.awt.*;
public class HouseExample extends Applet {
    public void paint(Graphics g) {
        Font f = new Font("TimesRoman", Font.BOLD, 20);
        g.setFont(f);
        g.drawString("HOUSE", 320, 180);
        //MAIN BUILDING STRUCTURE
        g.setColor(Color.red);
        g.drawRect(250, 200, 200, 400);
        g.fillRect(250, 200, 200, 400);
```

```
        g.setColor(Color.green);
        g.drawLine(250, 300, 450, 300);
        g.drawLine(250, 400, 450, 400);
        g.drawLine(250, 500, 450, 500);

        //first row window one
        g.setColor(Color.yellow);
        g.drawRect(280, 230, 30, 30);
        g.fillRect(280, 230, 30, 30);
        //first row window second
        g.setColor(Color.yellow);
        g.drawRect(380, 230, 30, 30);
        g.fillRect(380, 230, 30, 30);
        //second row window first
        g.setColor(Color.yellow);
        g.drawRect(280, 330, 30, 30);
        g.fillRect(280, 330, 30, 30);
        //second row window second
        g.setColor(Color.yellow);
        g.drawRect(380, 330, 30, 30);
        g.fillRect(380, 330, 30, 30);
        //third row window first
        g.setColor(Color.yellow);
        g.drawRect(280, 430, 30, 30);
        g.fillRect(280, 430, 30, 30);
        //third row window second
        g.setColor(Color.yellow);
        g.drawRect(380, 430, 30, 30);
        g.fillRect(380, 430, 30, 30);
        // MAIN GATE
        g.setColor(Color.yellow);
        g.drawRect(330, 530, 50, 70);
        g.fillRect(330, 530, 50, 70);
    }
}
/*
<applet code="HouseExample" width="1000" height="1000">
</applet>
*/
```

OUTPUT:



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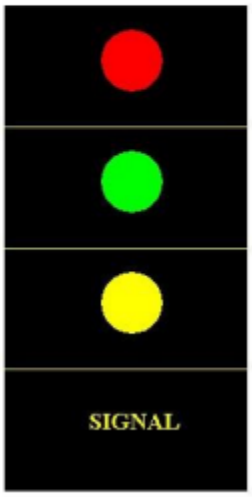
PART 02: TRAFFIC SIGNAL

```
import java.applet.Applet;
import java.awt.Graphics;
import java.awt.Font;
import java.awt.*;
public class TrafficExample extends Applet {
    public void paint(Graphics g) {
        Font f = new Font("TimesRoman", Font.BOLD, 20);
        g.setFont(f);
        //MAIN SIGNAL BOX
        g.setColor(Color.black);
        g.drawRect(250, 200, 200, 400);
        g.fillRect(250, 200, 200, 400);
        g.setColor(Color.yellow);
        g.drawLine(250, 300, 450, 300);
        g.drawLine(250, 400, 450, 400);
        g.drawLine(250, 500, 450, 500);
```

```
        g.drawString("SIGNAL", 320, 550);
        //RED CIRCLE
        g.setColor(Color.red);
        g.drawOval(330, 220, 50, 50);
        g.fillOval(330, 220, 50, 50);
        //GREEN CIRCLE
        g.setColor(Color.green);
        g.drawOval(330, 320, 50, 50);
        g.fillOval(330, 320, 50, 50);
        //YELLOW CIRCLE
        g.setColor(Color.yellow);
        g.drawOval(330, 420, 50, 50);
        g.fillOval(330, 420, 50, 50);
    }
}
/*
<applet code="TrafficExample" width="1000" height="1000">
</applet>
*/
```

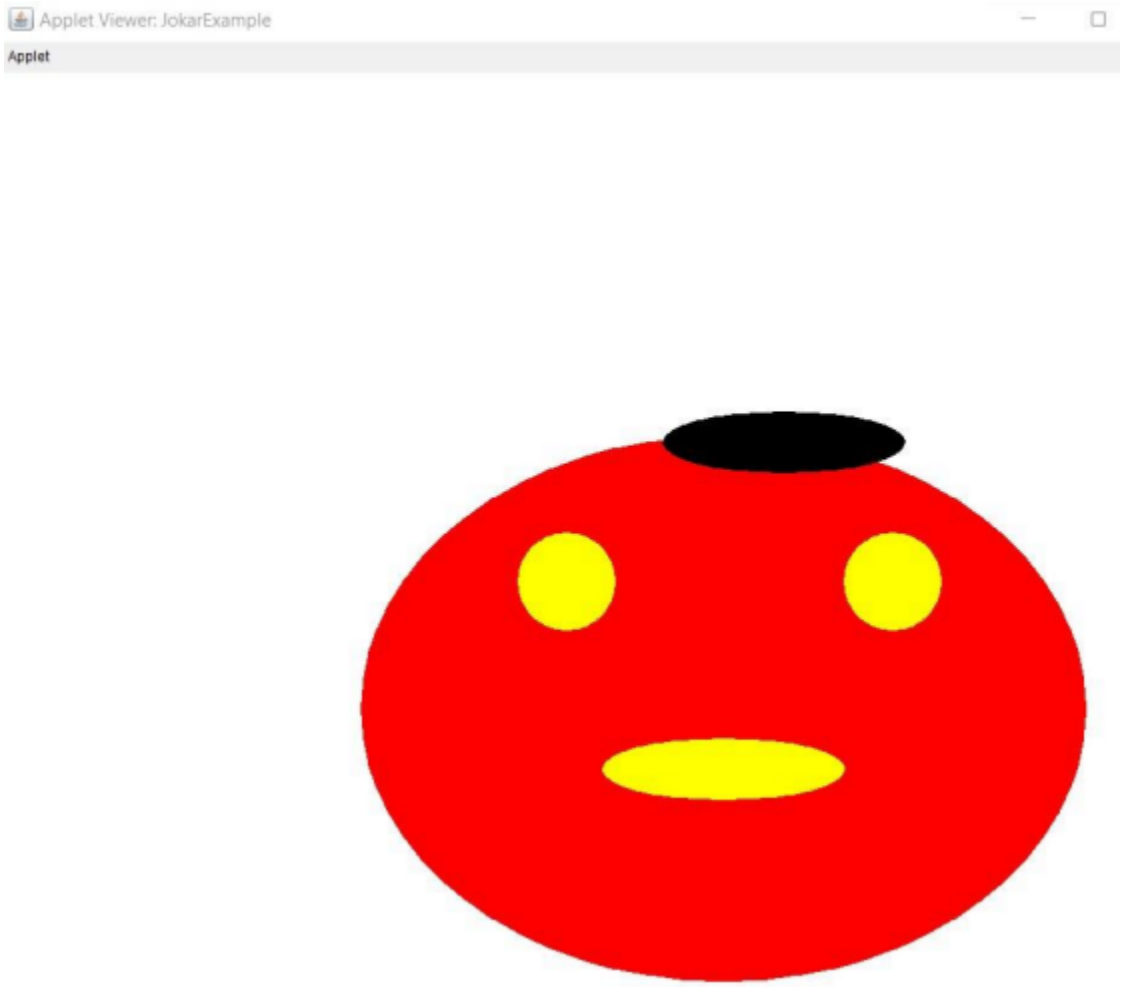
OUTPUT:



PART: 03 JOKER

```
import java.applet.Applet;
import java.awt.Graphics;
import java.awt.*;
public class JokarExample extends Applet {
   public void paint(Graphics g) { //MAIN CIRCLE
      g.setColor(Color.red);
      g.drawOval(300, 300, 600, 450);
      g.fillOval(300, 300, 600, 450);
      //FIRST EYE
      g.setColor(Color.yellow);
      g.drawOval(430, 380, 80, 80);
      g.fillOval(430, 380, 80, 80);
      //SECOND EYE
      g.setColor(Color.yellow);
      g.drawOval(700, 380, 80, 80);
      g.fillOval(700, 380, 80, 80);
      //MOUTH
      g.setColor(Color.yellow);
      g.drawOval(500, 550, 200, 50);
      g.fillOval(500, 550, 200, 50);
      //HAIR
      g.setColor(Color.black);
      g.drawOval(550, 280, 200, 50);
      g.fillOval(550, 280, 200, 50);
      /*
      //LEFT EARS
      g.setColor(Color.yellow);
      g.drawOval(500,550,200,50);
      g.fillOval(500,550,200,50);
      //RIGHT EARS
      g.setColor(Color.yellow);
      g.drawOval(500,550,200,50);
      g.fillOval(500,550,200,50);
      */
   }
}
/*
<applet code="JokarExample" width="1000" height="1000">
</applet>
*/
```

OUTPUT:



CONCLUSION: In this experiment, we see the different classes of the applet and successfully perform the Experiment.
