

Aim: Create, debug and run Java program based on graphics to draw, fill, different shapes.

Theory:

The Graphics class is the abstract base class for all graphics contexts that allow an application to draw onto components that are realized on various devices, as well as, onto off-screen image.

A Graphics object encapsulates state information needed for the basic rendering operation that Java support.

- The component object on which to draw
- A translation origin for rendering and clipping coordinates.
- The current clip.
- The current colour
- The current font
- The current logical pixel operation function [xor or paint]

- The current XOR Alternation Color
(see `setXORmode (Java.awt.Color)`)

Conclusion: Hence, we Successfully create,
debug and run Java Program
based on graphics to draw,
fill, different shape

blinking eyes.

```
import java.awt.*;  
import java.applet.*;
```

```
public class Assignment14 extends implements Runnable  
{
```

```
    Thread t = new Thread ();
```

```
    Color c;
```

```
    public void init () {}
```

```
    public void run () {}
```

```
    public void paint (Graphics g) {  
        boolean blink = false;
```

```
        int i = 255;
```

```
        int j = 0;
```

```
        int k = 0;
```

```
        while (true) {
```

```
            g.setColor (color.yellow);
```

```
            g.fillOval (200, 150, 200, 200);
```

```
            g.setColor (color.black);
```

```
            g.drawOval (250, 190, 30, 46);
```

```
            g.setColor (color.white);
```

```
            g.fillOval (250, 190, 28, 40);
```

```
            g.setColor (color.black);
```

```
            g.fillOval (255, 199, 20, 20);
```

```
            g.setColor (color.white);
```

```
            g.fillOval (260, 205, 10, 10);
```

```
            g.setColor (color.black);
```

```
            g.drawOval (320, 190, 30, 10);
```

```
            g.setColor (color.white);
```



```

g.fillOval (320, 190, 28, 40);
g.setColor (color.black);
g.fillOval (325, 199, 20, 20);
g.setColor (color.white);
g.fillOval (330, 203, 10, 10);
if (!blink) {
    C = new Color(r, g, b);
    g.setColor (C);
    g.fillOval (250, 190, 30, 40);
    g.fillOval (320, 190, 30, 40);
    if (j == 0 && k == 0) {
        j = 100;
    }
    else if (j == 100 && k == 0) {
        j = 225;
        k = 255;
    }
    else if (j == 255 && k == 255) {
        j = 0;
        k = 0;
    }
}
g.setColor (color.Red);
g.fillArc (255, 240, 90, 70, 0, -180);
blink = !blink;
try {
    t.sleep (500);
} catch (Exception e) {}
}
}

```



```
C:\Users\Public\Java>javac practical18.java
```

```
C:\Users\Public\Java>appletviewer practical18.
```

