Aim: Create a simple visual bean with a area filled with a color. The shape of the area depends on the property shape. If it is set to true then the shape of the area is Square and it is Circle, if it is false. The color of the area should be changed dynamically for every mouse click.

Program:

```
import java.awt.*;

import java.awt.event.*;

public class Colors extends Canvas{

transient private Color color;

private boolean rectangular;

public Colors(){

addMouseListener(new MouseAdapter() {

public void mousePressed(MouseEvent me){

        change();

    }

  });

  rectangular = false;

setSize(200,100);

change();

  }

public boolean getRectangular(){

return rectangular;

}

public void setRectangular(boolean flag){

this.rectangular = flag;

 repaint();

}
```
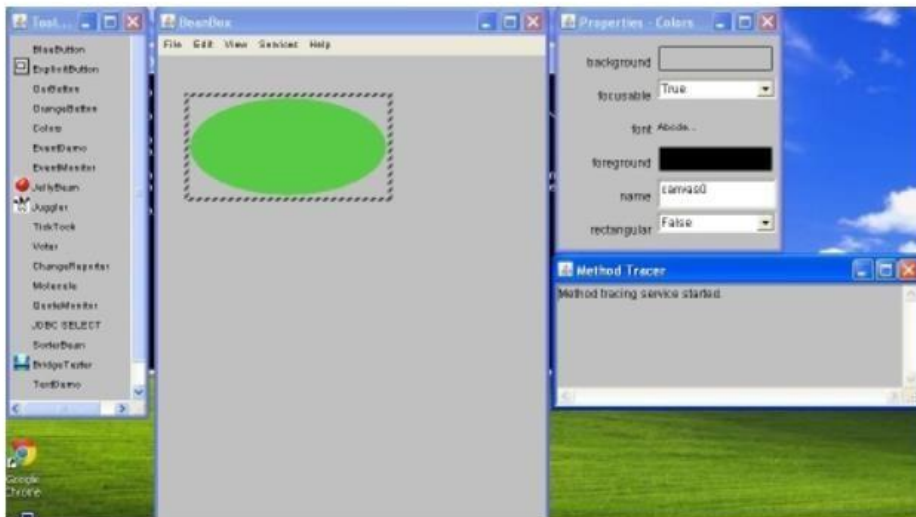
```java
public void change(){    color =

randomColor();

repaint();

}
private Color randomColor(){

int r = (int)(255*Math.random());

int g = (int)(255*Math.random());

int b = (int)(255*Math.random());

return new Color(r, g, b);

}

public void paint(Graphics g){

Dimension d =getSize();

int h = d.height;

int w = d.width;

 g.setColor(color);

if(rectangular){

    g.fillRect(0, 0, w-1, h-1);

}    else{

    g.fillOval(0, 0, w-1, h-1);

  }

}

}
```
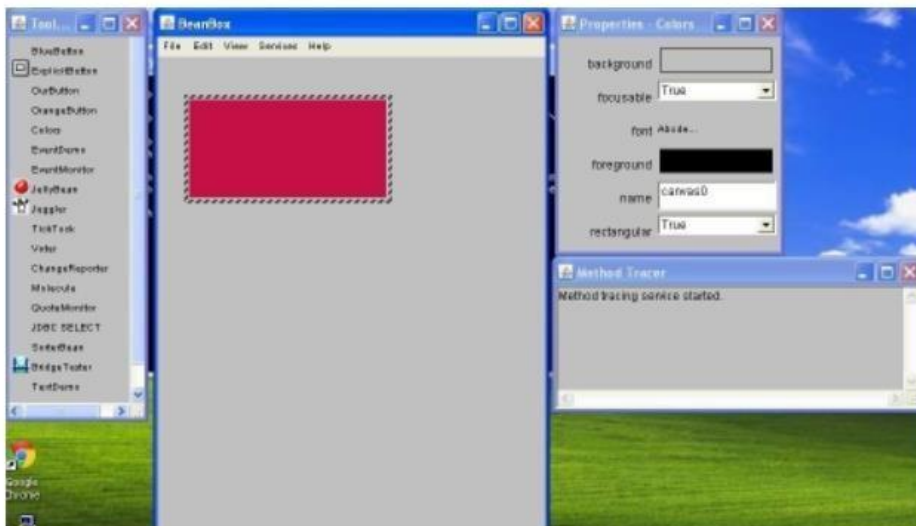
Output:

Screen shot for circle:

- Section -

Screen shot for triangle:

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