

```
import java.awt.Graphics;
import java.applet.Applet;
import java.util.Arrays;
import java.util.Random;
import java.awt.Color;
```

```
public class Stars extends Applet
{
    public void paint(Graphics g)
    {
        setSize(1400,800);
        Random randy = new Random();
        int[] Xvals = new int[10];
        int[] Yvals = new int[10];
        for(int b = 0; b<=9; b++)
        {
            int xmove = randy.nextInt(1000)+200;
            int ymove = randy.nextInt(500)+200;
            int angle = randy.nextInt(360);
            int bigRadius = randy.nextInt(125)+75;
            int smallRadius = (int)(0.4 * bigRadius);

            int j = 0;
            for (int i = 0; i < 10; i+=2)
            {
                Xvals[i] = (int)(bigRadius * Math.cos(Math.toRadians(18+72*j+angle)) + xmove);
                Yvals[i] = (int)(bigRadius * Math.sin(Math.toRadians(18+72*j+angle)) + ymove);
                j++;
            }
            int f = 0;
            for(int a = 1; a < 10; a+=2)
            {
                Xvals[a] = (int)(smallRadius * Math.cos(Math.toRadians(54+72*f+angle)) +
xmove);
                Yvals[a] = (int)(smallRadius * Math.sin(Math.toRadians(54+72*f+angle)) +
ymove);
                f++;
            }
            g.setColor(new Color(randy.nextInt(256), randy.nextInt(256), randy.nextInt(256)));

            g.fillPolygon(Xvals,Yvals,10);
        }

        System.out.println(Arrays.toString(Xvals));
        System.out.println(Arrays.toString(Yvals));
    }
}
```



Applet Viewer: Stars.class



Applet started.