

```

//package StaticArray.Stars;

import java.applet.Applet;
import java.awt.Graphics;
import java.util.Random;

public class Stars extends Applet {
    public void paint(Graphics g) {
        Random rand = new Random();

        for (int i = 0; i < 10; i++) {
            int rad = rand.nextInt(50);
            int centerX = rand.nextInt(500 - rad * 2);
            int centerY = rand.nextInt(500 - rad * 2);
            int[] xs = new int[10];
            int[] ys = new int[10];
            int num = 0;
            for (int a = 0; a < 5; a++) {
                int x = (int) ((rad * Math.cos(((2 * Math.PI) / 5) * a)) + centerX);
                int y = (int) ((rad * Math.sin(((2 * Math.PI) / 5) * a)) + centerY);
                xs[num] = x;
                ys[num] = y;
                num++;
                x = (int) (((rad * 2) * Math.cos(((2 * Math.PI) / 5) * (a + 0.5))) +
centerX);
                y = (int) (((rad * 2) * Math.sin(((2 * Math.PI) / 5) * (a + 0.5))) +
centerY);

                xs[num] = x;
                ys[num] = y;
                num++;
            }
            g.drawPolygon(xs, ys, 10);
        }
    }
}

```