

```
1
2 import java.applet.Applet;
10
11 public class Star extends Applet {
12
13     public void paint(Graphics g) {
14         Random rand = new Random();
15
16         for (int i = 0; i < 10; i++) {
17             int radius = rand.nextInt(50);
18             int cX = rand.nextInt(500);
19
20             int cY = rand.nextInt(500);
21
22             int[] xPoints = new int[10];
23             int[] yPoints = new int[10];
24
25             int count = 0;
26             for (int j = 0; j < 5; j++) {
27                 xPoints[count] += Math.cos(((2 * Math.PI) / 5) * j)
* radius + cX;
28                 yPoints[count] += Math.sin(((2 * Math.PI) / 5) * j)
* radius + cY;
29
30                 count++;
31
32                 xPoints[count] += Math.cos(((2 * Math.PI) / 5) * (j
+ 0.5)) * 2 * radius + cX;
33                 yPoints[count] += Math.sin(((2 * Math.PI) / 5) * (j
+ 0.5)) * 2 * radius + cY;
34
35                 count++;
36             }
37
38             g.fillPolygon(xPoints, yPoints, 10);
39         }
40     }
41 }
42 }
43
```