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

public class Stars extends Applet
{

public void paint(Graphics g)
{
    setSize(1000, 650);
    g.setColor(Color.BLACK);
    g.fillRect(0, 0, 2000, 2000);
    Random rand = new Random();
    for (int i = 0; i < 10; i++) {
        int x = rand.nextInt(getWidth());
        int y = rand.nextInt(getHeight());
        int size = rand.nextInt(150) + 60;
        star(g, x, y, size);
    }
}

public void star(Graphics g, int centerX, int centerY, int radius)
{
    int[] polygonX = new int[10];
    int[] polygonY = new int[10];
    double innerRadius =
radius*Math.sin(Math.toRadians(18)/Math.sin(Math.toRadians(54)));
    for (int i = 18; i < 360; i += 72) {
        polygonX[(i - 18)/36] = centerX + (int) (radius * Math.cos(Math.toRadians(i)));
        polygonY[(i - 18)/36] = centerY - (int) (radius * Math.sin(Math.toRadians(i)));
    }

    for (int i = 54; i < 360; i += 72) {
        polygonX[(i - 18)/36] = centerX + (int) (innerRadius *
Math.cos(Math.toRadians(i)));
        polygonY[(i - 18)/36] = centerY - (int) (innerRadius *
Math.sin(Math.toRadians(i)));
    }

    int red = (int) (Math.random() * 256);
    int green = (int) (Math.random() * 256);
    int blue = (int) (Math.random() * 256);
    Color randomColor = new Color(red, green, blue);

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g.setColor(randomColor);  
    g.fillPolygon(polygonX, polygonY, 10);  
}  
}
```