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

public class Stars extends Applet {

    public void paint(Graphics g) {

        setBackground(Color.BLACK);
        Random rand = new Random();

        int radiusLarge = rand.nextInt(100);
        int radiusSmall = radiusLarge / 2;
        int xTrans = rand.nextInt(1000);
        int yTrans = rand.nextInt(500);
        double angle = 2 * Math.PI;

        int[] xVals = new int[10];
        int[] yVals = new int[10];

        for (int count = 0; count < 10; count++) {
            g.setColor(Color.yellow);

            for (int i=0; i < 10; i += 2) {
                xVals[i] = (int) (radiusLarge * Math.cos(angle)) + xTrans;
                yVals[i] = (int) (radiusLarge * Math.sin(angle)) + yTrans;
                xVals[i+1] = (int) (radiusSmall * Math.cos(angle + ((2 * Math.PI)/5)/2)) +
                    xTrans;
                yVals[i+1] = (int) (radiusSmall * Math.sin(angle + ((2 * Math.PI)/5)/2)) +
                    yTrans;
                angle += (2 * Math.PI)/5;
            }

            radiusLarge = rand.nextInt(100);
            radiusSmall = radiusLarge / 2;
            xTrans = rand.nextInt(1000);
            yTrans = rand.nextInt(500);

            g.fillPolygon(xVals, yVals, 10);
        }
    }
}
```