**GUI10 Starburst**

**Directions**

Write a GUI program that uses a **do while loop** to create a starburst design similar to the sample runs shown below.

The program should draw 300 lines with each line extending out from the center of the window (250, 250) to another point selected at random. As you draw the lines alternate between two different colors.

One way to alternate colors is to use the remainder operator. Look at the following code. Assume that a variable named **counter** has been defined and is used as the **loop control variable** for a do while loop.

if(counter % 2 == 0)

{

page.setColor(Color.blue);

}

else

{

page.setColor(Color.yellow);

}

The if statement condition calculates the remainder when counter is divided by 2. If the remainder equals 0 then counter is an even number. If the remainder equals 1 then counter is an odd number. As counter counts up by one the if statement alternates between setting the color to either blue or yellow.

Copy the following code into your source file.

import java.util.\*;

import java.awt.\*;

import javax.swing.\*;

import java.awt.event.\*;

public class GUI10 extends JFrame

{

// constructor

public GUI10()

{

// set frame attributes

setLayout(null);

setSize(500, 500);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

getContentPane().setBackground(Color.black);

setVisible(true);

}

public void paint(Graphics page)

{

super.paint(page); // erase background

}

// main method

public static void main(String[] args)

{

GUI10 app = new GUI10(); // run program

}

}

All of your code needs to be in the **paint** method.

**Source File**

GUI10.java

**Sample Run 1**

 