**GUI06 RandomLines**

**Directions**

Write a GUI program that draws 500 lines in the frame window. Each line should be drawn from one random point to another in a random color.

1. Open your GUI workspace.  
2. Create a java file named GUI06 and copy the code below into the file.

import java.util.\*;

import java.awt.\*;

import javax.swing.\*;

import java.awt.event.\*;

public class GUI06 extends JFrame

{

// constructor

public GUI06()

{

// 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)

{

GUI06 app = new GUI06(); // run program

}

}

paint Method

Recall that the paint method is called anytime the frame window needs to be drawn. All of the code for this assignment will need to be within this method after the line that erases the background.

Random Color

The following code can be used to generate a random color.

int r = (int)(Math.random() \* 256); // random red

int g = (int)(Math.random() \* 256); // random green

int b = (int)(Math.random() \* 256); // random blue

Color myColor = new Color(r, g, b); // create color

page.setColor(myColor); // set graphics object to new color

Random Line

The following code can be used to generate a random line.

int x1 = (int)(Math.random() \* 500);

int y1 = (int)(Math.random() \* 500);

int x2 = (int)(Math.random() \* 500);

int y2 = (int)(Math.random() \* 500);

page.drawLine(x1, y1, x2, y2); // draw line from point (x1, y1) to (x2, y2)

**Source File**

GUI06.java

**Sample Run**

