**GUI - ActionListener**

Make a copy of one of your Layout exercises and give it a new class name.

Alter the class so that each button A and B has an action listener added to them. Implement the following actions:

**Button A**

* when button A is clicked it will generate a random number from 0 to 10000.
* It will also generate 3 random integers between 0 to 255 that are used to represent the RGB values of a custom color. Use the custom color to alter the text color of Label A and print the random number from 0 to 10000.
* It will also generate a random number between 400 to 600 and alter the width of the JFrame. The original height should not change.

**Button B**

* when button B is clicked it will generate a random number from -5000 to -1. Print the random number from -5000 to -1 in Label B.
* It will also generate 3 random integers between 0 to 255 that are used to represent the RGB values of a custom color. Use the custom color to alter the background color of Button B.
* It will also generate a random number between 300 to 500 and alter the height of the JFrame. The original width should not change.

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| import java.awt.\*;  import javax.swing.\*;  import java.awt.event.\*;  public class GUI implements ActionListener  {    JFrame f;  JButton buttonA, buttonB;  JLabel lblA, lblB;    int random = 0, red = 0, green = 0, blue = 0, width = 400, height = 400;    public GUI(){    f = new JFrame();  f.setLayout(new GridLayout(2,1,10,10));    buttonA = new JButton("Button A");  buttonB = new JButton("Button B");    lblA = new JLabel("Random Number", JLabel.CENTER);  lblB = new JLabel("Random Number", JLabel.CENTER);    f.add(lblA);  f.add(lblB);  f.add(buttonA);  f.add(buttonB);    buttonA.addActionListener(this);  buttonB.addActionListener(this);    f.setSize(width, height);  f.setResizable(false);  f.setLocationRelativeTo(null);  f.setVisible(true);    }    public void actionPerformed(ActionEvent e)  {    //Generate a new colour  red = (int)(Math.random()\*256);  green = (int)(Math.random()\*256);  blue = (int)(Math.random()\*256);    //When buttonA is pressed  if(e.getSource() == buttonA)  {  random = (int)(Math.random()\*10001);  width = (int)(Math.random()\*201) + 400;    //Change the color and the text of the labelA  lblA.setForeground(new Color(red, green, blue));  lblA.setText(random + "");  }    //When buttonB is pressed  else  {  random = (int)(Math.random()\*5000) - 5000;  height = (int)(Math.random()\*201) + 300;    //Change the color of the buttonB and the text of the labelA  buttonB.setBackground(new Color(red, green, blue));  lblB.setText(random + "");  }    //Resize the window  f.setSize(width, height);  f.setLocationRelativeTo(null);    }    public static void main(String[] args)  {  new GUI();  }  } |
| Paste a screenshot of your frame after click each of the buttons at least once: |