

Lab program 9

```
import javax.swing.*;  
import java.awt.*;  
import java.awt.event.*;
```

```
class SwingDemo  
{
```

```
    SwingDemo()  
{
```

```
    JFrame jfrm = new JFrame("Divides App");  
    jfrm.setSize(275, 150);  
    jfrm.setLayout(new FlowLayout());  
    jfrm.setDefaultCloseOperation(JFrame.  
        EXIT_ON_CLOSE);
```

```
    JLabel jlab = new JLabel("Enter the divider  
        and dividend:");
```

```
    JTextField ajtf = new JTextField(8);
```

```
    JTextField btf = new JTextField(8);
```

```
    JButton button = new JButton("calculate");
```

```
    JLabel ecr = new JLabel();
```

```
    JLabel alab = new JLabel();
```

```
    JLabel blab = new JLabel();
```

```
    JLabel anslab = new JLabel();
```

```
    jfrm.add(ecr);
```

```
    jfrm.add(jlab);
```

```
    jfrm.add(ajtf);
```

```
    jfrm.add(btf);
```

```
    jfrm.add(button);
```

```
    jfrm.add(alab);
```

```
    jfrm.add(blab);
```

```
tfm.add(anslab);
```

```
ActionListener l = new ActionListener()
```

```
{
```

```
    public void actionPerformed(ActionEvent evt)
```

```
    {
```

```
        System.out.println("Action event from a  
text field");
```

```
    }
```

```
}
```

```
a1tf.addActionListener(l);
```

```
b1tf.addActionListener(l);
```

```
button.addActionListener(new ActionListener()
```

```
{
```

```
    public void actionPerformed(ActionEvent evt)
```

```
    {
```

```
        try {
```

```
            int a = Integer.parseInt(a1tf.getText());
```

```
            int b = Integer.parseInt(b1tf.getText());
```

```
            int ans = a/b;
```

```
            alab.setText("In A = " + a);
```

```
            blab.setText("In B = " + b);
```

```
            anslab.setText("In Ans = " + ans);
```

```
        }
```

```
        catch (NumberFormatException e)
```

```
        {
```

```
            alab.setText(" ");
```

```
            blab.setText(" ");
```

```
            anslab.setText(" ");
```

```
            ewr.setText("Enter only Integers!");
```

Output

tests the divider and dividend:

01

calculate.

B should be Now zero!

Enter the divider and dividend:

12

0

calculate.

Enter the divider and dividend:

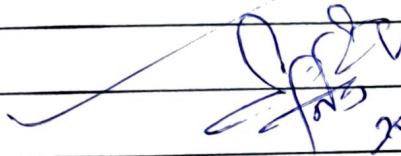
12

3

calculate. $A=12$ $B=3$ Ans=4

- **JFrame**: JFrame is a class in the Swing library that represents a window with a title bar and borders in a GUI application.
- **setSize**: This method of the 'JFrame' class sets the size of the window to the specified width and height in pixels.
- **setLayout**: This method of the 'Container' class sets the layout manager for arranging components within the container.
- **setDefaultCloseOperation**: This method of the 'JFrame' class sets the default close operation for the frame. The 'operation' parameter specifies what action should be taken when the user closes the window.
- **JLabel**: 'JLabel' is a swing component used to display text @ an image on a GUI. It is typically used to provide descriptive text @ captions for other components.
- **JTextField**: This is a swing component used to allow the user to input a single line of text. It provides a text editing area where the user can type and edit text.

- AddActionListener: This method of the 'AbstractButton' class registers an action listener to be notified when the button is clicked.
- setText: This method of the 'JLabel' @ 'JTextField' class sets the text content of the label @ text field to the specified string.


20.02.24