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Lab 10 programs:-

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

class SwingDemo {
    SwingDemo(){
        JFrame jfrm = new JFrame("Divider App");
        jfrm.setSize(275, 250);
        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 bjtf = new JTextField(8);

        JButton button = new JButton("Calculate");

        JLabel err = new JLabel();
        JLabel alab = new JLabel();
        JLabel blab = new JLabel();
        JLabel anslab = new JLabel();

        jfrm.add(err);
        jfrm.add(jlab);
        jfrm.add(ajtf);
        jfrm.add(bjtf);
        jfrm.add(button);
        jfrm.add(alab);
        jfrm.add(blab);
        jfrm.add(anslab);
```

```
ActionListener l = new ActionListener() {
    public void actionPerformed(ActionEvent evt) {
        S.O.Println("Action event from a text field");
    }
};
ajtf.addActionListener(l);
bjtf.addActionListener(l);

button.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent evt) {
        try {
            int a = Integer.parseInt(ajtf.getText());
            int b = Integer.parseInt(bjtf.getText());
            int ans = a/b;

            alab.setText("\n A = " +a);
            blab.setText("\n B = " +b);
            anslab.setText("\n Ans = " +ans);
        }
        catch(NumberFormatException e) {
            alab.setText("");
            blab.setText("");
            anslab.setText("");
            err.setText("Enter only Integers!");
        }
        catch(ArithmeticException e) {
            alab.setText("");
            blab.setText("");
            anslab.setText("");
            err.setText("B should be non zero!");
        }
    }
});
```

```
});
jfrm.setVisible(true);
}
public static void main(String args[]) {
    SwingUtilities.invokeLater(new Runnable() {
        public void run() {
            new SwingDemo();
        }
    });
}
```

OUTPUT:-

Enter the divider and dividend:

25 5.

Calculate A = 25 B = 5 ~~and~~ Ans = 5.

JFrame: is a class in Java Swing that represents a top-level container for a GUI application.

setSize(): used to set size of a JFrame in pixels.

setLayout(): this method is used to layout manager for the JFrame.

setDefaultCloseOperation(): to set the default close operation for the JFrame.

JLabel: is a Swing component ~~used to display~~ a non-editable text.

JTextField: Swing component that allows the user to ~~out~~ enter and edit a single line of text.

add(frame): method used to add components to a container.

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addActionListener(): method used with components like buttons to register an ActionListener.

setText(): used with components like JTextField or JLabel to set the text content.