

LAB – 9 (Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the text fields, Num1 and Num2. The division of Num1 and Num2 is displayed in the Result field when the Divide button is clicked. If Num1 or Num2 were not an integer, the program would throw a NumberFormatException. If Num2 were Zero, the program would throw an Arithmetic Exception Display the exception in a message dialog box.)

SOURCE CODE:

```
import javax.swing.*;

import java.awt.*;

import java.awt.event.*;

class SwingDemo{

    SwingDemo(){

        // create jframe container

        JFrame jfrm = new JFrame("Divider App");

        jfrm.setSize(275, 150);

        jfrm.setLayout(new FlowLayout());

        // to terminate on close

        jfrm.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        // text label

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

        // add text field for both numbers

        JTextField ajtf = new JTextField(8);

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

```
// calc button

JButton button = new JButton("Calculate");


// labels

JLabel err = new JLabel();

JLabel alab = new JLabel();

JLabel blab = new JLabel();

JLabel anslab = new JLabel();


// add in order :)

jfrm.add(err); // to display error bois

jfrm.add(jlab);

jfrm.add(ajtff);

jfrm.add(bjtf);

jfrm.add(button);

jfrm.add(alab);

jfrm.add(blab);

jfrm.add(anslab);


ActionListener l = new ActionListener() {

    public void actionPerformed(ActionEvent evt) {

        System.out.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("\nA = " + a);
```

```
            blab.setText("\nB = " + b);
```

```
            anslab.setText("\nAns = "+ 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!");
```

```

        }

    }

});

// display frame

jfrm.setVisible(true);

}

public static void main(String args[]){

    // create frame on event dispatching thread

    SwingUtilities.invokeLater(new Runnable(){

        public void run(){

            new SwingDemo();

        }

    });

}

}

```

OUTPUT:

