

Lab-9

write a program that creates a user interface to perform integer divisions. The user enters 2 numbers in the text fields, Num1 & Num2. The division of Num1 & 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 ArithmeticException. Display the exception in a message dialog box.

```
→ 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(1));
        jfrm.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

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

```
form.add(cerr);
```

```
form.add(jlab);
```

```
form.add(aJtf);
```

```
form.add(bJtf);
```

```
form.add(button);
```

```
form.add(alab);
```

```
form.add(blab);
```

```
form.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("");
```

```
        cerr.setText("Enter only integers!");
```

```
    }
```

```

catch (ArithmeticException e) {
    alab.setText(" ");
    blab.setText(" ");
    eor.setText("Enter only integers!");
}
}
}
}

```

```

jtm.setVisible(true);
}

```

```

public static void main (String args[])
{

```

```

    SwingUtilities.invokeLater (new Runnable() {
        public void run() {
            new SwingDemo();
        }
    });
}
}

```

O/P:

Enter the dividend and divisor
 125 5

Calculate

A = 125

B = 5

Ans = 25

Rs

4/12/24