

(Q) Write a program that creates a user interface to perform integer division. The user enters two numbers in the text fields, Num 1 and Num 2. The division of Num 1 and Num 2 is displayed in the result if button is clicked. If Num 1 and Num 2 were not an integer program will throw a NumberFormatException. If Num 2 is 0, program will throw an ArithmeticException.

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

```
class Division1 extends JFrame implements ActionListener {
```

```
    TextField tf1;
```

```
    TextField tf2;
```

```
    TextField tf3;
```

```
    Button b;
```

```
    Dialog d1;
```

```
    Division1() {
```

```
        setSize(300, 300);
```

```
        setVisible(true);
```

```
        setLayout(null);
```

```
        addWindowListener(new WindowAdapter() {
```

```
            public void windowClosing(WindowEvent e) {
```

```
                dispose();
```

```
            }
```

}
tf1 = new TextField("Number 1");

tf1.setBounds(10, 70, 200, 30);

add(tf1);

b = new Button("/");

b.setBounds(10, 110, 200, 30);

b.addActionListener(this);

add(b);

tf2 = new TextField("Number 2");

tf2.setBounds(10, 70, 200, 30);

add(tf2);

tf3 = new TextField("Output");

tf3.setBounds(10, 150, 200, 30);

add(tf3);

}

public void actionPerformed(ActionEvent e) {

try {

String num1 = tf1.getText();

int nu1 = Integer.parseInt(num1);

String num2 = tf2.getText();

int nu2 = Integer.parseInt(num2);

int result = nu1/nu2;

tf3.setText(Integer.toString(result));

}

catch (NumberFormatException e2) {

dlg = new Dialog(f, "error", true);

Label l = new Label(" " + e2);

d1.add(l);

d1.setSize(300, 50);

d1.setVisible(true);

}

catch (ArithmeticException e1) {

d1 = new Dialog¹⁵(f, "error", true);

Label l = new Label(" " + e1);

d1.add(l);

d1.setSize(300, 50);

d1.setVisible(true);

}

}

}

public class App {

public static void main(String[] args) {

Division d = new Division();

}

}