

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 ArithmeticException. Display the exception in a message dialog box.

```

import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
class IntegerDivision extends JFrame implements ActionListener {

```

```

    TextField n1, n2, res;
    Label ln1, ln2, lres;
    Button b;

```

```

    public IntegerDivision() {

```

```

        setLayout(new FlowLayout(1));
        Label ln1 = new Label("Number 1", Label.RIGHT);
        Label ln2 = new Label("Number 2", Label.RIGHT);
        Label lres = new Label("RESULT", Label.RIGHT);
        n1 = new TextField(12);
        n2 = new TextField(8);
        res = new TextField(10);
        b = new Button("DIVIDE");
        add(ln1);
        add(n1);
        add(ln2);
        add(n2);
        add(b);
    }
}

```

```

add (res);
add (res);
b. add ActionListener (this);
addWindowListener (new WindowAdapter ());

```

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```

public void actionPerformed (ActionEvent ae)

```

```

{
    if (ae.getSource () == b)
    {

```

```

        try {

```

```

            int num1 = Integer.parseInt (u1.getText ());
            int num2 = Integer.parseInt (u2.getText ());
            int num3 = num1 / num2;
            res.setText (String.valueOf (num3));

```

```

        }
        catch (NumberFormatException ne)

```

```

        {
            JOptionPane.showMessageDialog (this, ne, "ERROR",
                JOptionPane.ERROR_MESSAGE);

```

```

        }
        catch (ArithmeticException a)

```

```

        {
            JOptionPane.showMessageDialog (this, a,
                "ERROR", JOptionPane.ERROR_MESSAGE);

```

3

3

3

```

public static void main (String args [])

```

```

{
    IntegerDivision i = new IntegerDivision ();

```

```

    i.setSize (new Dimension (400, 400));

```

```

    i.setTitle ("ENTER DIVISION OF TWO NUMBERS");

```

```

    i.setVisible (true);

```

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class WindowAdapter1 extends WindowAdapter.

```
{  
    public void windowClosing(WindowEvent we)  
    {  
        System.exit(0);  
    }  
}
```

NUMBER 1 50 NUMBER 2 2 DIVIDE RESULT 25

NUMBER 1 50 NUMBER 2 2.00 DIVIDE RESULT 25



NUMBER 1 50 NUMBER 2 test DIVIDE RESULT 25



NUMBER 1 50 NUMBER 2 0 DIVIDE RESULT 25

