

PROGRAM 6

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.*;

public class DivApplet extends JApplet implements ActionListener{

    JTextField number1,number2,result;

    JButton divide;

    public void init(){

        try {

            SwingUtilities.invokeLater(

                new Runnable() {

                    public void run() {

                        makeGUI();

                    }

                });

        }

        catch (Exception exc) {

            System.out.println("Can't create because of " + exc);

        }

    }

    private void makeGUI(){

        setLayout(new FlowLayout());

        Label number1p = new Label("Number1: ",Label.RIGHT);

        Label number2p = new Label("Number2: ",Label.RIGHT);

        number1= new JTextField(20);
```

```
number2 = new JTextField(20);
```

```
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```

```
result = new JTextField(20);
```

```
divide = new JButton("Divide");
```

```
add(number1p);
```

```
add(number1);
```

```
add(number2p);
```

```
add(number2);
```

```
add(result);
```

```
add(divide);
```

```
divide.addActionListener(this);
```

```
}
```

```
public void actionPerformed(ActionEvent e){
```

```
String snumber1,snumber2;
```

```
snumber1 = number1.getText();
```

```
snumber2 = number2.getText();
```

```
try{
```

```
int number1 = Integer.parseInt(snumber1);
```

```
int number2 = Integer.parseInt(snumber2);
```

```
if(number2==0)
```

```
JOptionPane.showMessageDialog(null, "Division by zero not defined.");
```

```
else{
```

```
double r = (double)number1/number2;
```

```
result.setText(((Double)r).toString());
```

```
}
```

```
}
```

```
catch(NumberFormatException ne)
```

```
{
```

```
JOptionPane.showMessageDialog(null,"Enter a number");
```

```
}  
}  
}
```

OUTPUT



