

Open ended exercise

Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the text field, 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 number format exception. If num2 were zero, the program would throw an arithmetic exception. display the execution 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());
```

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

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

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

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

```
        JButton = new JButton("Calculate");
```

```
        JLabel cLabel = new JLabel();
```

```
        JLabel aLabel = new JLabel();
```

```
        JLabel bLabel = new JLabel();
```

```
        JLabel ansLabel = new JLabel();
```

```
jfrm.add(eas);
```

```
jfrm.add(jlab);
```

```
jfrm.add(ajtf);
```

```
jfrm.add(bjtf);
```

```
jfrm.add(button);
```

```
jfrm.add(alab);
```

```
jfrm.add(blab);
```

```
jfrm.add(anslab);
```

```
ActionListener l = new ActionListener() {  
    public void actionPerformed(ActionEvent e) {  
        System.out.println("action event from a  
        text field");  
    }  
};
```

```
};
```

```
ajtf.addActionListener(l);
```

```
bjtf.addActionListener(l);
```

```
button.addActionListener(new ActionListener() {
```

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

```
        try {
```

```
            int a = Integer.parseInt(ajtf.getText());
```

```
            int b = Integer.parseInt(bjtf.getText());
```

```
            int ans = a/b;
```

```
            alab.setText("\n A = " + a);
```

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

```
            ansLab.setText("\n Ans = " + ans);
```

```
        }  
        catch (NumberFormatException e) {
```

```
            alab.setText("");
```

```
            blab.setText("");
```

```
            ansLab.setText("");
```

```
            eas.setText("");
```



```
} catch (ArithmeticException e) {
```

```
    aLab.setText("");
```

```
    bLab.setText("");
```

```
    ansLab.setText("");
```

```
    err.setText("B should be non zero");
```

```
}
```

```
}
```

```
} );
```

```
ifam.setVisible(true);
```

```
}
```

```
public static void main (String [] args) {
```

```
    SwingUtilities.invokeLater(new Runnable() {
```

```
        public void run() {
```

```
            new Swingdemo();
```

```
        }
```

```
    });
```

```
}
```

```
}
```

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 number 1 and num 2 is displayed in the result field when the divide button is clicked. If num 1 or num 2 were not an integer, the program would throw a number format exception. If num 2 were zero the program would throw an arithmetic exception display the exception in a message dialog box.

O/P

Dividees App

Enter the divider and dividend

12 6

Calculate A=12 B=6 Ans=2