

LAB 10

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.

CODE:

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

public class lab10 extends Frame implements ActionListener {
    TextField num1, num2;
    Label l;
    Button n;

    lab10() {
        num1 = new TextField();
        num1.setBounds(50, 50, 200, 25);

        num2 = new TextField();
        num2.setBounds(50, 100, 200, 25);

        l = new Label();
        l.setBounds(50, 150, 300, 50);

        n = new Button("Divide");
        n.setBounds(50, 200, 100, 50);
        n.addActionListener(this);

        add(n);
        add(num1);
        add(num2);
        add(l);
        setSize(800, 800);

        setLayout(null);
        setVisible(true);
    }

    public void actionPerformed(ActionEvent e) {
```

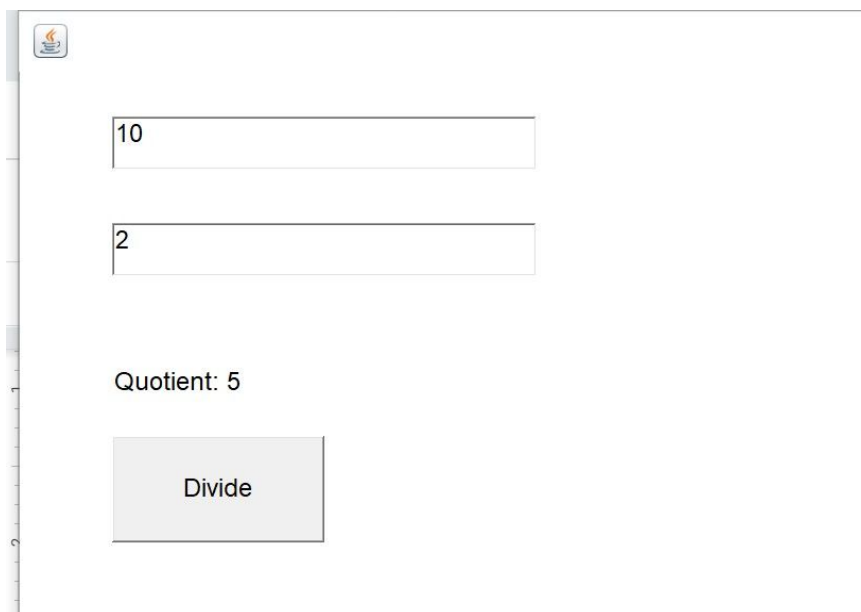
```

        try {
            String n1 = num1.getText();
            String n2 = num2.getText();
            l.setText("Quotient: " + (Integer.parseInt(n1) /
Integer.parseInt(n2)));
        } catch (NumberFormatException ze) {
            l.setText("Cannot divide non-integer values");
        } catch (ArithmeticException ze) {
            l.setText("Cannot divide");
        } catch (Exception ex) {
            System.out.println(ex);
        }
    }

    public static void main(String[] args) {
        new lab10();
    }
}

```

OUTPUT:



The screenshot shows a Java Swing application window titled "lab10". Inside the window, there are two text input fields. The first field contains the number "10" and the second field contains the number "2". Below these fields, there is a label that reads "Quotient: 5". At the bottom of the window, there is a button labeled "Divide". The window has a standard Mac OS X title bar with a red, yellow, and green button in the top-left corner.



10

0

Cannot divide

Divide