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**LAB PROGRAM-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 Arithmetic Exception Display the exception in a message dialog box.**

**CODE:**

```
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());
        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(lres);
        add(res);
        b.addActionListener(this);
        addWindowListener(new WindowAdapter1());
    }
    public void actionPerformed(ActionEvent ae)
    {
        if(ae.getSource()==b)
        {
            try{
                int num1=Integer.parseInt(n1.getText());
```

```

        int num2=Integer.parseInt(n2.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);
    }
}
}
public static void main(String args[])
{
    integerdivision i=new integerdivision();
    i.setSize(new Dimension(400,400));
    i.setTitle("INTEGER DIVISION OF TWO NUMBERS");
    i.setVisible(true);
}

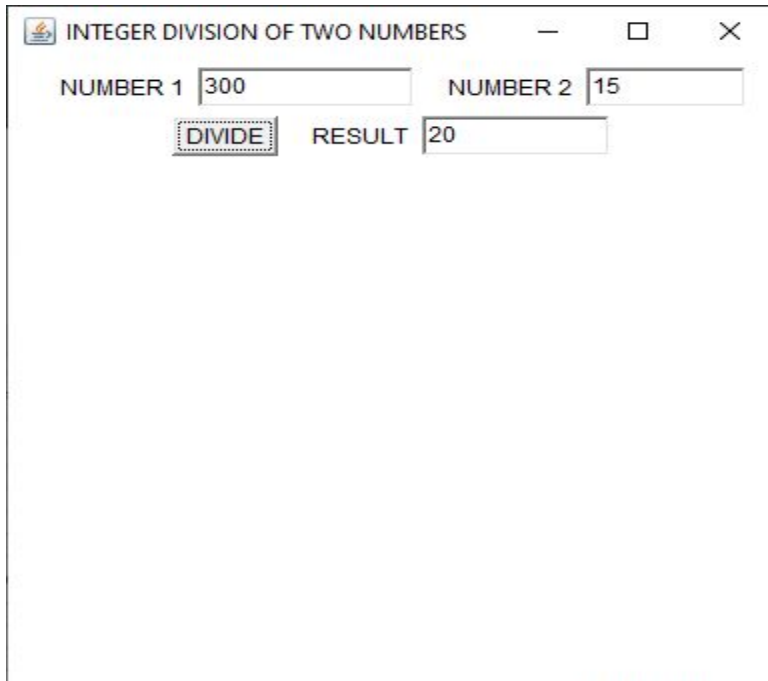
class WindowAdapter1 extends WindowAdapter{
    public void windowClosing(WindowEvent we)
    {
        System.exit(0);
    }
}
}

```

## OUTPUT:

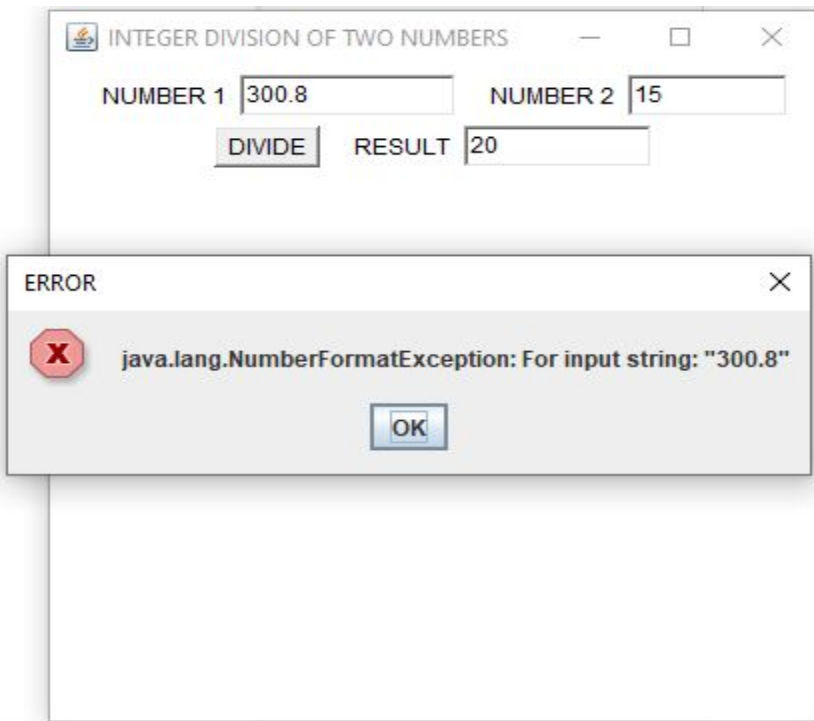
```
D:\Kusum\III SEMESTER\00J2020>javac lab10.java  
D:\Kusum\III SEMESTER\00J2020>java integerdivision
```

### CASE 1:Both Num1 and Num2 are integers



The screenshot shows a Java Swing window titled "INTEGER DIVISION OF TWO NUMBERS". It contains two text input fields: "NUMBER 1" with the value "300" and "NUMBER 2" with the value "15". Below these fields is a "DIVIDE" button and a "RESULT" label followed by a text input field containing the value "20".

### CASE 2:If Num1, Num2 is/are decimal type



The screenshot shows the same "INTEGER DIVISION OF TWO NUMBERS" window, but with "NUMBER 1" set to "300.8" and "NUMBER 2" set to "15". The "DIVIDE" button is visible, and the "RESULT" field shows "20". Overlaid on top of this window is an "ERROR" dialog box. The dialog box has a red "X" icon and contains the text: "java.lang.NumberFormatException: For input string: \"300.8\"". There is an "OK" button at the bottom of the error dialog.

### CASE 3: If Num2 is zero

