

## Lab Program 10

Q) Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the text fields, Num 1 & Num 2. The division of Num 1 & 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 is zero, the program would throw an Arithmetic Exception. Display the exception in a message dialog box.

```
A. import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

public class IntegerDivision extends JFrame and implements ActionListener {
    TextField n1, n2, res;
    Label In1, In2, Pres;
    Button b;

    public IntegerDivision() {
        setLayout(new FlowLayout());
        Label In1 = new Label("Number 1", Label.RIGHT);
        Label In2 = new Label("Number 2", Label.RIGHT);
        Label Pres = new Label("RESULT", Label.RIGHT);
        n1 = new TextField(12);
        n2 = new TextField(8);
        res = new TextField(10);
        b = new Button("DIVIDE");
        add(In1);
        add(n1);
        add(In2);
        add(n2);
        add(b);
        add(Pres);
        add(res);
    }
}
```



~~b.add~~

b.addActionListener(this);  
addWindowListener(new WindowAdapter());

{

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 WindowAdapter extends WindowAdapter {

public void windowClosing(WindowEvent we) {

System.exit(0);

}

```
import javax.swing.*;

public class integerdivision extends Frame 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)
```

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

public 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)
```

integerdivision - Notepad

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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");

Ln 17, Col 11100%Windows (CRLF)UTF-8


NUMBER 1  NUMBER 2   RESULT



NUMBER 1  NUMBER 2   RESULT

NUMBER 1  NUMBER 2   RESULT

ERROR

 `java.lang.NumberFormatException: For input string: "lh"`