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Date :

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.

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

public class Lab10 extends Frame implements
 ActionListener {

TextField t1, t2;
String msg = "";
Button btn;

Lab10()
 {
  Label l1 = new Label("First Number:", Label.RIGHT);

t1 = new TextField(10);
Label l2 = new Label("Second Number:", Label.RIGHT);
t2 = new TextField(10);

btn = new Button("Submit");
```

```
l1.setBackground(Color.YELLOW);
l2.setBackground(Color.YELLOW);

this.add(l1);
this.add(t1);
this.add(l2);
this.add(t2);

this.add(btn, BorderLayout.CENTER);
this.setVisible(true);
this.setSize(600, 300);
this.setLayout(new FlowLayout(FlowLayout.CENTER, 20
                                                 , 10));
btn.addActionListener(this);
addWindowListener(new MyWindow());
setBackground(Color.YELLOW);
}

@Override
public Insets getInsets()
{
  return new Insets(50, 10, 10, 20);
}

public void actionPerformed(ActionEvent e)
{
  String st1 = t1.getText();
  String st2 = t2.getText();
  double n1, n2;
  n1=0.0;
  n2=0.0;

if(st1.equals("") || st2.equals(""))
{
```

```
        msg = "You cannot leave the text
              elements blank";
    }
    else
    {
      try
        {
          n1 = Double.parseDouble(st1);
          n2 = Double.parseDouble(st2);

      try {
            double res = n1/n2;
            msg = "Result of division: " +res;
        }
      catch (ArithmeticException e1)
      {
          msg = e1.toString();
      }
    }
    catch ( NumberFormatException e2)
    {
    msg = "Enter only numbers and not other
      strings";
    }
    }
    new Dialog (this, "Result Dialog", false, msg, W, H);
    }
    public static void main (String args[])
    {
        new Lab10();
    }
    }
```

```
class MyDialog extends Dialog implements
ActionListener{

public MyDialog (Frame owner, String title,
boolean modal, String msg, double n1,
double n2)
{
    super (owner, title, modal);
    this.setVisible(true);
    this.setSize(300, 400);
    this.setLayout (new FlowLayout());

Label l1 = new Label("Updates on the
                      result: ");

    this.add(l1);
this.add (new Label("First number:"+n1));
this.add (new Label("Second number:"+n2));
this.add (new Label(msg));

Button b = new Button("Close");
 this.add(b);
b.addActionListener(this);
this.addWindowListener(new WindowAdapter()
{
public void windowClosing(WindowEvent e)
{
    dispose();
}
});
}
public void actionPerformed(ActionEvent e)
{
    disp dispose();
```

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```
}
}

class MyWindow extends WindowAdapter
{
    public void windowClosing(WindowEvent e)
    {
        System.exit(0);
    }
}
```