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 & Num2. The division of Num1 & Num2 is displayed in the result field when the divide button is clicked. If Num1 & 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 exception in a message dialog box.

⇒
```
import java.awt.*;
import java.awt.event.*;
class DialogBox extends Frame implements
                        ActionListener {
    IntDivisionD id;
    DialogBox(Frame parent, String title) {
        super(parent, title, true);
        id = (IntDivisionD) parent;
        setLayout(new FlowLayout());
        setSize(300,300);
        add(new Lable(id.msg));
        Button b;
        add(b=new Button("OK"));
        b.addActionListener(this);
    }
    public void actionPerformed(ActionEvent
                                ae) {
        dispose();
    }
}
```

```
public class IntDivisionD extends Frame
                implements ActionListener
{ Textfield num1, num2, result;
  String res, msg;
  Button div;
  public IntDivision(){
    setLayout(new FlowLayout());
    div= new Button("Divide");
    Lable numa = new Label("Number 1
                  :", Label.RIGHT);
    Lable numb = new Label("Number 2:",
                  Label.RIGHT);
Lable
res1= new
Label("Result
  :"Label.
  RIGHT);
    num1=new TextField(5);
    num2=new TextField(5);
    result=new Textfield(10);
    add(numa);
    add(num1);
    add(div);
    add(numb);
    add(num2);
    add(res1);
    add(result);
    num1.addActionListener(this);
    num2.addActionListener(this);
    div.addActionListener(this);
    result.addActionListener(this);
    addWindowListener(new WindowAdapter(
      { public void WindowClosing
                    (WindowEvent we)
        { System.exit(0); }
    });
}
```

```
public void actionPerformed (ActionEvent ae){
    String S=ae.getActionCommand();
    if(S.equals("Divide")) {
        result.setText(divide());
    }
}
String divide(){
    int n1,n2,n=0;
    try{
        n1=Integer.parseInt(num1.getText());
        n2=Integer.parseInt(num2.getText());
    }
    catch(NumberFormatException nfe){
        msg="entered numbers must be integers";
        DialogBox d=new DialogBox(this,"Dialog");
        d.setVisible(true);
    }
    n1=Integer.parseInt(num1.getText());
    n2=Integer.parseInt(num2.getText());
    if(n2==0){
        msg="cannot divide a number by 0";
        DialogBox d=new DialogBox(this,"Dialog");
        d.setVisible(true);
        return "";
    }
    else
        n=n1/n2;
    res=Double.toString(n);
    return res;
}
public static void main(String args[]){
    IntDivision1 intdiv=new IntDivision1();
    intdiv.setSize(new Dimension(380,180));
    intdiv.setTitle("TextFieldDemo");
    intdiv.setVisible(true);
}}
```