

LAB 10

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

```
public class Division extends Frame implements  
ActionListener {
```

```
    public class DialogD extends Frame {
```

```
        String msg;
```

```
        Dialog myDialog;
```

```
        public DialogD() {
```

```
            myDialog = new Dialog(this, "new Dialog", msg);  
        }
```

```
    }
```

```
    TextField num1, num2, res;
```

```
    Label l1, l2, l3;
```

```
    Button div;
```

```
    public Division() {
```

```
        SetLayout(new FlowLayout());
```

```
        l1 = new Label("Dividend", Label.RIGHT);
```

```
        l2 = new Label("Divisor", Label.RIGHT);
```

```
        l3 = new Label("Result", Label.RIGHT);
```

```
        num1 = new TextField(10);
```

```
        num2 = new TextField(10);
```

```
        res = new TextField(10);
```

```
        div = new Button("Divide");
```

```
        add(l1); add(num1);
```

```
        add(l2); add(num2);
```

```
        add(l3); add(res);
```

```
        add(div);
```

```
        div.addActionListener(new MyWindowAdapter());
```

```
    }
```

```
public void actionPerformed (ActionEvent ae) {  
    int num1 = 0; num2 = 0;  
    try {  
        num1 = Integer.parseInt (this.num1.getText());  
        num2 = Integer.parseInt (this.num2.getText());  
        double num3 = (double) num1 / num2;  
        res.setText (String.valueOf (num3));  
        msg = "Division Successful";  
    }  
    catch (NumberFormatException e) {  
        System.out.println (e);  
        res.setText ("");  
        msg = "NumberFormatException";  
        Dialog dd = new Dialog (this, "Dialog", msg);  
        dd.setVisible (true);  
        return;  
    }  
    try {  
        if (num2 == 0)  
            throw new ArithmeticException ();  
        msg = "Can't be divided by Zero";  
    }  
    catch (ArithmeticException e) {  
        System.out.println ("Can't be divided by Zero" + e);  
        res.setText ("");  
        msg = "Can't be divided by Zero";  
        Dialog dd = new Dialog (this, "Dialog", msg);  
        dd.setVisible (true);  
        return;  
    }  
}
```



```
public void paint (Graphics g){
    g.drawString(msg, 80, 100);
}
```

```
public static void main (String[] args){
    Division appwin = new Division ();
    appwin.setSize (new Dimension (480, 280));
    appwin.setTitle ("Division");
    appwin.setVisible (true);
}
}
```

```
class JDialog extends Dialog {
    JDialog (Frame parent, String title, String msg){
        super (parent, title, false);
        setLayout (new FlowLayout ());
        setSize (300, 300);
        add (new Label (msg));
        Button b;
        add (b = new Button ("OK"));
        b.addActionListener (ae) -> dispose ();
        add WindowListener (new WindowAdapter () {
            public void windowClosing (WindowEvent we)
            {
                dispose ();
            }
        });
    }
}
}
```