

## Lab Program - 10

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

class SampleDialog extends Dialog implements
ActionListener
```

```
{
    Division div;
    SampleDialog(Frame parent, String title)
```

```
{
    super(parent, title, false);
    div = (Division)parent;
    setLayout(new FlowLayout());
    setSize(400, 150);
    add(new Label(div.msg));
    Button b;
    add(b = new Button("OK"));
    b.addActionListener(this);
}
```

```
public void actionPerformed(ActionEvent ae)
{
    dispose();
}
}
```

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

```
{
    String msg = "";
    String msg1 = "";
    TextField t1, t2, res;
    Button b;
    Label result = new Label("Result: ", Label.RIGHT);
}
```

```
public Division()
```

```
{  
    setLayout(new FlowLayout());  
    label num1 = new Label("Number 1 :"  
        label.RIGHT);
```

```
    label num2 = new Label("Number 2 :"  
        label.RIGHT);
```

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

```
    n1 = new TextField(10);
```

```
    n2 = new TextField(10);
```

```
    res = new TextField(35);
```

```
    add(num1);
```

```
    add(n1);
```

```
    add(num2);
```

```
    add(n2);
```

```
    b = (Button)add(div);
```

```
    add(result);
```

```
    add(res);
```

```
    n1.addActionListener(this);
```

```
    n2.addActionListener(this);
```

```
    b.addActionListener(this);
```

```
    addWindowListener(new WindowAdapter() {
```

```
        public void windowClosing(WindowEvent we)
```

```
        {  
            System.exit(0);
```

```
        }  
    });
```

```
public static void main(String args[])
```

```
{  
    Division appwin = new Division();
```

```
    appwin.setSize(new Dimension(450, 100));
```



```
appwin.setTitle("Integer - Division");
appwin.setVisible(true);
```

```
}
public void actionPerformed(ActionEvent ae)
```

```
{
    if(!n1.getText().equals("")) && !n2.getText().equals(""))
```

```
{
    try
```

```
{
        msg = "" + (Integer.parseInt(n1.getText()) /
                    Integer.parseInt(n2.getText()));
        res.setText(msg);
    }
```

```
catch (NumberFormatException e)
{
```

```
    msg = "ERROR: Enter only Integers";
    res.setText("");
    SampleDialog d = new SampleDialog(this,
                                        "ERROR");
```

```
    d.setVisible(true);
```

```
}
catch (ArithmeticException e)
```

```
{
    msg = "ERROR: Division cannot be ZERO";
    res.setText("");
    SampleDialog d = new SampleDialog(this,
                                        "ERROR");
```

```
    d.setVisible(true);
```

```
}
```

```
else
```

```
{
```

```
    msg = "ERROR: Number fields should NOT  
be EMPTY";
```

```
res.setText("");
```

```
SampleDialog d = new SampleDialog(this,  
"ERROR");
```

```
d.setVisible(true);
```

```
}
```

```
SwingUtilities.invokeLater(() -> {
```

```
}
```

```
});
```

```
}
```

```
// (this is initialization method) + "" - load
```

```
// (this is the method that will be called
```

```
when the button is clicked)
```