

LAB-10

Ajith M S

IBM IACS010

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

public class Division extends Frame implements ActionListener {
    public class DialogD extends Frame {
        String msg;
        DialogD myDialog;

        public DialogD() {
            myDialog = new DialogD(this, "New Dialog Box", msg);
        }
        String msg;

        TextField num1, num2, res;
        Label l1, l2, l3;
        Button div;

        public DialogD() {
            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(this);  
addWindowListener(new MyWindowAdapter());  
}
```

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

```
{  
    initnum1 = 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 = "No Arithmetic Exception";
```

```
Dialog da = new Dialog(this, "Dialog", msg);
```

```
da.setModal(true);
```

```
return
```

```
}
```

```
try {
```

```
if (num == 0)
```

```
throw new ArithmeticException();
```

```
msg = "Can't be divided by zero";
```

```
}
```

```
catch (ArithmeticException e) {
```

```
System.out.println("Can't be divided by zero" + e);
```

```
da.setText("");
```

```
msg = "Can't be divided by zero";
```

```
Dialog da = new Dialog(this, "Dialog", msg);
```

```
da.setModal(true);
```

```
return
```

```
}
```

```
}
```

```
public void paint(Graphics g)
```

```
{
```

```
g.drawString(msg, 80, 100);
```

```
}
```

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

```
{
```

```
Window appwin = new Window();
```

```
appwin.setSize(new Dimension(480, 280));
```

```
appwin.setTitle("Divisor");
```

```
}
```

```
class MyWindowAdapter extends WindowAdapter
```

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

```
{
```

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

```
}
```

```
}
```

```
class JDialog extends Dialog {
```

```
    JDialog (Frame parent, String title, String msg)
```

```
{
```

```
    super (parent, title, false);
```

```
    setLayout (new FlowLayout());
```

```
    setSize (300, 300);
```

```
    add (new JLabel(msg));
```

```
    Button b;
```

```
    add (b = new Button("OK"));
```

```
    b.addActionListener((ae) dispose());
```

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

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

```
{
```

```
            dispose();
```

```
}
```

```
}
```

```
}
```

```
}
```