

# LAB Program : 10

## Code

```
1  import java.awt.*;
2  import java.awt.event.*;
3
4  class DivisionDialog extends Dialog implements ActionListener
5  {
6      DivisionNewMain divnew;
7      DivisionDialog(Frame parent,String title)
8      {
9
10         super(parent,title,true);
11         divnew=(DivisionNewMain)parent;
12         setLayout(new FlowLayout());
13         setSize(600,200);
14         if(divnew.flag==0)
15         {
16             add(new Label("Result: " + divnew.out));
17         }
18         else
19         {
20             add(new Label(divnew.out));
21         }
22
23         Button b;
24         add(b= new Button("OK"));
25         b.addActionListener(this);
26     }
27
28     public void actionPerformed(ActionEvent ae)
29     {
30         dispose();
31     }
32 }
33 public class DivisionNewMain extends Frame implements ActionListener
34 {
35     TextField num1,num2;
36     Button dResult;
37     String out="";
38     int flag=0;
39
40     public DivisionNewMain()
41     {
42         setLayout(new FlowLayout());
43
44         dResult = new Button("RESULT");
45         Label number1 = new Label("Number 1:",Label.RIGHT);
46         Label number2 = new Label("Number 2:",Label.RIGHT);
```

```
46         Label number2 = new Label("Number 2:",Label.RIGHT);
47         num1=new TextField(5);
48         num2=new TextField(5);
49
50         add(number1);
51         add(num1);
52         add(number2);
53         add(num2);
54         add(dResult);
55
56         dResult.addActionListener(this);
57         addWindowListener(new WindowAdapter()
58         {
59             public void windowClosing(WindowEvent we)
60             {
61                 System.exit(0);
62             }
63         });
64     }
65
66     public void actionPerformed(ActionEvent ae)
67     {
68         int n1,n2;
69         try
70         {
71             if (ae.getSource() == dResult)
72             {
73                 n1=Integer.parseInt(num1.getText());
74                 n2=Integer.parseInt(num2.getText());
75                 if(n2==0)
76                     throw new ArithmeticException();
77                 double resultNum=n1/(double)n2;
78                 out=String.valueOf(resultNum);
79                 DivisionDialog d=new DivisionDialog(this,"Result");
80                 d.setVisible(true);
81             }
82         }
83         catch(NumberFormatException e1)
84         {
85             flag=-1;
86             out="Number Format Exception! "+e1;
87             DivisionDialog d=new DivisionDialog(this,"Error");
88             d.setVisible(true);
89         }
90         catch(ArithmeticException e2)
91         {
```

```
91         {
92             flag=-1;
93             out="Divide by 0 Exception! "+e2;
94             DivisionDialog d=new DivisionDialog(this,"Error");
95             d.setVisible(true);
96         }
97     }
98
99     public static void main(String[] args)
100     {
101         DivisionNewMain dm=new DivisionNewMain();
102         dm.setSize(new Dimension(800,400));
103         dm.setTitle("Divion Of Integers");
104         dm.setVisible(true);
105     }
106
107 }
108
```

# Output

