

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(300, 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);
47 
```

```
48         Label number2 = new Label("Number 2:",Label.RIGHT);
49         num1=new TextField(5);
50         num2=new TextField(5);
51 
52         add(number1);
53         add(num1);
54         add(number2);
55         add(num2);
56         add(dResult);
57 
58         dResult.addActionListener(this);
59         addWindowListener(new WindowAdapter()
60         {
61             public void windowClosing(WindowEvent we)
62             {
63                 System.exit(0);
64             }
65         });
66 
67     public void actionPerformed(ActionEvent ae)
68     {
69         int n1,n2;
70         try
71         {
72             if (ae.getSource() == dResult)
73             {
74                 n1=Integer.parseInt(num1.getText());
75                 n2=Integer.parseInt(num2.getText());
76                 if(n2==0)
77                     throw new ArithmeticException();
78                 double resultNum=n1/(double)n2;
79                 out=String.valueOf(resultNum);
80                 DivisionDialog d=new DivisionDialog(this,"Result");
81                 d.setVisible(true);
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         {
```

```
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(300,400));
103        dm.setTitle("Division Of Integers");
104        dm.setVisible(true);
105    }
106 }
107 }
```

Output

