

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         super(parent,title,true);
10        divnew = (DivisionNewMain)parent;
11        setLayout(new FlowLayout());
12        setSize(600,200);
13        if(divnew.flag==0)
14        {
15            add(new Label("Result: " + divnew.out));
16        }
17        else
18        {
19            add(new Label(divnew.out));
20            divnew.flag=0;
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,outResult;
36     Button dResult;
37     String out="";
38     int flag=0;
39
40     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         Label outResultL = new Label("Result:",Label.RIGHT);
48
```

```
46         Label number2 = new Label("Number 2:",Label.RIGHT);
47         Label outResultL = new Label("Result:",Label.RIGHT);
48
49         num1=new TextField(5);
50         num2=new TextField(5);
51         outResult=new TextField(6);
52         add(number1);
53         add(num1);
54         add(number2);
55         add(num2);
56         add(dResult);
57         add(outResultL);
58         add(outResult);
59         outResult.setEnabled(false);
60
61         dResult.addActionListener(this);
62         addWindowListener(new WindowAdapter()
63         {
64             public void windowClosing(WindowEvent we)
65             {
66                 System.exit(0);
67             }
68         });
69     }
70
71     public void actionPerformed(ActionEvent ae)
72     {
73         int n1,n2;
74         try
75         {
76             if (ae.getSource() == dResult)
77             {
78                 n1=Integer.parseInt(num1.getText());
79                 n2=Integer.parseInt(num2.getText());
80                 if(n2==0)
81                     throw new ArithmeticException();
82                 double resultNum=n1/(double)n2;
83                 out=String.valueOf(resultNum);
84                 outResult.setText(out);
85             }
86         }
87         catch(NumberFormatException e1)
88         {
89             flag=1;
90             out="Number Format Exception! "+e1;
91             outResult.setText("Input Error");
92             DivisionDialog d=new DivisionDialog(this,"Error");
93             d.setVisible(true);
94
```

```
92             DivisionDialog d=new DivisionDialog(this,"Error");
93             d.setVisible(true);
94         }
95         catch(ArithmeticException e2)
96         {
97             flag=1;
98             out="Divide by 0 Exception! "+e2;
99             outResult.setText("Input Error");
100            DivisionDialog d=new DivisionDialog(this,"Error");
101            d.setVisible(true);
102        }
103    }
104
105    public static void main(String[] args)
106    {
107        DivisionNewMain dm=new DivisionNewMain();
108        dm.setSize(new Dimension(800,400));
109        dm.setTitle("Divion Of Integers");
110        dm.setVisible(true);
111    }
112 }
```

Output

