

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 = new DivisionNewMain();
11        divnew.setLayout(new FlowLayout());
12        divnew.setSize(500, 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 outResult = new Label("Result:", Label.RIGHT);
48 
49         Label number2 = new Label("Number 2:", Label.RIGHT);
50         Label outResult = new Label("Result:", Label.RIGHT);
51 
52         num1=new TextField(5);
53         num2=new TextField(5);
54         outResult=new TextField(6);
55         add(number1);
56         add(num1);
57         add(number2);
58         add(num2);
59         add(dResult);
60         add(outResult);
61         add(outResult);
62         outResult.setEnabled(false);
63 
64         dResult.addActionListener(this);
65         addWindowListener(new WindowAdapter()
66         {
67             public void windowClosing(WindowEvent we)
68             {
69                 System.exit(0);
70             }
71         });
72     }
73 
74     public void actionPerformed(ActionEvent ae)
75     {
76         int n1, n2;
77         try
78         {
79             if (ae.getSource() == dResult)
80             {
81                 n1=Integer.parseInt(num1.getText());
82                 n2=Integer.parseInt(num2.getText());
83                 if(n2==0)
84                     throw new ArithmeticException();
85                 double resultNum=n1/(double)n2;
86                 out.setString(resultNum);
87                 outResult.setText(out);
88             }
89         }
90         catch(NumberFormatException e1)
91         {
92             flag=1;
93             out="Number Format Exception! "+e1;
94             outResult.setText("Input Error");
95             DivisionDialog d=new DivisionDialog(this, "Error");
96             d.setVisible(true);
97 
98             DivisionDialog d=new DivisionDialog(this, "Error");
99             d.setVisible(true);
100         }
101     }
102 }
103 
104 public static void main(String[] args)
105 {
106     DivisionNewMain dm=new DivisionNewMain();
107     dm.setSize(new Dimension(800,400));
108     dm.setTitle("Division Of Integers");
109     dm.setVisible(true);
110 }
111 }
112 }
```

```
46 
47         Label number2 = new Label("Number 2:", Label.RIGHT);
48         Label outResult = new Label("Result:", Label.RIGHT);
49 
50         num1=new TextField(5);
51         num2=new TextField(5);
52         outResult=new TextField(6);
53         add(number1);
54         add(num1);
55         add(number2);
56         add(num2);
57         add(dResult);
58         add(outResult);
59         add(outResult);
60         outResult.setEnabled(false);
61 
62         dResult.addActionListener(this);
63         addWindowListener(new WindowAdapter()
64         {
65             public void windowClosing(WindowEvent we)
66             {
67                 System.exit(0);
68             }
69         });
70     }
71 
72     public void actionPerformed(ActionEvent ae)
73     {
74         int n1, n2;
75         try
76         {
77             if (ae.getSource() == dResult)
78             {
79                 n1=Integer.parseInt(num1.getText());
80                 n2=Integer.parseInt(num2.getText());
81                 if(n2==0)
82                     throw new ArithmeticException();
83                 double resultNum=n1/(double)n2;
84                 out.setString(resultNum);
85                 outResult.setText(out);
86             }
87         }
88         catch(NumberFormatException e1)
89         {
90             flag=1;
91             out="Number Format Exception! "+e1;
92             outResult.setText("Input Error");
93             DivisionDialog d=new DivisionDialog(this, "Error");
94             d.setVisible(true);
95 
96             DivisionDialog d=new DivisionDialog(this, "Error");
97             d.setVisible(true);
98 
99             catch(ArithmeticException e2)
100             {
101                 flag=1;
102                 out="Divide by 0 Exception! "+e2;
103                 outResult.setText("Input Error");
104                 DivisionDialog d=new DivisionDialog(this, "Error");
105                 d.setVisible(true);
106             }
107         }
108     }
109 
110     public static void main(String[] args)
111     {
112         DivisionNewMain dm=new DivisionNewMain();
113         dm.setSize(new Dimension(800,400));
114         dm.setTitle("Division Of Integers");
115         dm.setVisible(true);
116     }
117 }
```

Output

