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1  /*Write a program that creates a user interface to perform integer divisions. The user enters two
2  numbers in the text fields, Num1 and Num2. The division of Num1 and Num2 is displayed in the
3  Result field when the Divide button is clicked. If Num1 or Num2 were not an integer, the program
4  would throw a NumberFormatException. If Num2 were Zero, the program would throw an
5  Arithmetic Exception Display the exception in a message dialog box.*/
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```
6  import java.awt.*;
7  import java.awt.event.*;
8  public class IntDivision extends Frame implements ActionListener{
9      TextField num1,num2,result;
10     String res,msg1="",msg2="";
11     Button div;
12     public IntDivision(){
13         setLayout(new FlowLayout());
14         div=new Button("Divide");
15         Label numa=new Label("Number 1: ",Label.RIGHT);
16         Label numb=new Label("Number 2: ",Label.RIGHT);
17         Label res1=new Label("Result: ",Label.RIGHT);
18         num1=new TextField(5);
19         num2=new TextField(5);
20         result=new TextField(10);
21         add(numa);
22         add(num1);
23         add(div);
24         add(numb);
25         add(num2);
26         add(res1);
27         add(result);
```

```
21 add(num1);
22 add(num1);
23 add(div);
24 add(numb);
25 add(num2);
26 add(res1);
27 add(result);
28 num1.addActionListener(this);
29 div.addActionListener(this);
30 num2.addActionListener(this);
31 result.addActionListener(this);
32 addWindowListener(new WindowAdapter(){
33     public void windowClosing(WindowEvent we){
34         System.exit(0);
35     }
36 });
37 }
38 public void actionPerformed(ActionEvent ae){
39     String s=ae.getActionCommand();
40     if(s.equals("Divide"))
41     {
42         result.setText(divide());
43     }
44     repaint();
45 }
46 String divide(){
47     float r;
```

```
45 }
46 String divide(){
47     float r;
48     int n1,n2;
49     try{
50         n1=Integer.parseInt(num1.getText());
51         n2=Integer.parseInt(num2.getText());
52     }
53     catch(NumberFormatException nfe){
54         msg2="The input number should be integer";
55         return "";
56     }
57     try{
58         r=(Float.parseFloat(num1.getText()))/(Float.parseFloat(num2.getText()));
59         res=String.valueOf(r);
60     }
61     catch(ArithmeticException ae){
62         msg1="Cannot divide a number by zero";
63         return "";
64     }
65     if((Float.parseFloat(num2.getText()))==0){
66         msg1="Cannot divide num1 by zero";
67         return "";
68     }
69     else{
70         r=(Float.parseFloat(num1.getText()))/(Float.parseFloat(num2.getText()));
```

ButtonDemo.java

IntDivision.java

TextFieldDemo.java

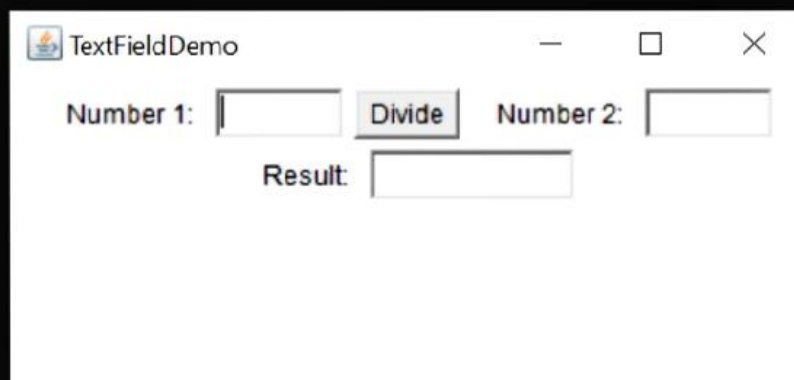
```
63         return "";
64     }
65     if((Float.parseFloat(num2.getText()))==0){
66         msg1="Cannot divide num1 by zero";
67         return "";
68     }
69     else{
70         r=(Float.parseFloat(num1.getText()))/(Float.parseFloat(num2.getText()));
71         res=String.valueOf(r);
72         return res;
73     }
74 }
75 public void paint(Graphics g){
76     g.drawString(msg1,20,100);
77     msg1="";
78     g.drawString(msg2,20,100);
79     msg2="";
80 }
81
82 public static void main(String args[]){
83     IntDivision intdiv=new IntDivision();
84     intdiv.setSize(new Dimension(380,180));
85     intdiv.setTitle("TextFieldDemo");
86     intdiv.setVisible(true);
87 }
88 }
```

```
C:\Users\harshitha>cd C:\Program Files\Java\bin\basic
```

```
C:\Program Files\Java\bin\basic>set path="C:\Program Files\Java\bin"
```

```
C:\Program Files\Java\bin\basic>javac IntDivision.java
```

```
C:\Program Files\Java\bin\basic>java IntDivision
```



Number 1:   Number 2:  Result:

Number 1:   Number 2:  Result:

Cannot divide num1 by zero

Number 1:   Number 2:  Result:

The input number should be integer