

```
import java.awt.*;

import java.awt.event.*;

public class MathOp extends Frame implements ActionListener
{ TextField Num1, Num2, Op, Result;
  Button Operate;

  public MathOp()
  { setLayout(new FlowLayout());
    Operate = new Button("Apply");

    Label Num1p = new Label("Num1: ", Label.RIGHT);
    Label Num2p = new Label("Num2: ", Label.RIGHT);
    Label Opp = new Label("Operator: ", Label.RIGHT);
    Num1 = new TextField(10);
    Num2 = new TextField(10);
    Op = new TextField(10);
    Result = new TextField(10);
    add(Num1p);
    add(Num1);
    add(Num2p);
    add(Num2);
    add(Opp);
    add(Op);
    add(Operate);
    add(Result);

    Operate.addActionListener(this);

    addWindowListener(new WindowAdapter(){
      public void windowClosing(WindowEvent we)
```

```
{ System.exit(0); }  
});  
  
}  
  
public void actionPerformed(ActionEvent ae)  
{ int a,b,r;  
String o;  
o=Op.getText();  
a = Integer.parseInt(Num1.getText());  
b = Integer.parseInt(Num2.getText());
```

```
  
switch(o)  
{ case "+" : Result.setText(""+(a+b));  
break;  
case "-" : Result.setText(""+(a-b));  
break;  
case "*" : Result.setText(""+(a*b));  
break;  
case "%" : Result.setText(""+(a%b));  
break;  
case "/" : if(b==0)  
Result.setText("Invalid");  
else  
Result.setText(""+(a/b));  
break;  
default :  
}  
}
```

```
  
public static void main(String args[])  
{ MathOp appwin = new MathOp();  
appwin.setSize(new Dimension(700,700));  
appwin.setTitle("Math Operations");
```

```
appwin.setVisible(true);
```

```
}
```

```
}
```

Command Prompt - java MathOp

```
D:\Java\jdk1.8.0_261\bin\prog>javac MathOp.java
```

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D:\Java\jdk1.8.0_261\bin\prog>java MathOp
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A screenshot of a Java application window titled "Math Operations". The window has a standard Windows title bar with minimize, maximize, and close buttons. Inside the window, there are three input fields: "Num1:" with the value "100", "Num2:" with the value "23", and "Operator:" with the value "+". To the right of these fields is a button labeled "Apply". To the right of the "Apply" button is a text field displaying the result "123". The window is set against a white background.

Command Prompt - java MathOp

```
D:\Java\jdk1.8.0_261\bin\prog>javac MathOp.java
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D:\Java\jdk1.8.0_261\bin\prog>java MathOp
```

A screenshot of the same "Math Operations" Java application window. In this state, the "Num1:" field still contains "100" and the "Num2:" field still contains "23". However, the "Operator:" field now contains "-", and the result displayed in the text field to the right of the "Apply" button is "77". The window's title bar and background remain the same as in the previous screenshot.

D:\Java\jdk1.8.0\_261\bin\prog>javac MathOp.java

D:\Java\jdk1.8.0\_261\bin\prog>java MathOp

Math Operations

Num1:  Num2:  Operator:

D:\Java\jdk1.8.0\_261\bin\prog>javac MathOp.java

D:\Java\jdk1.8.0\_261\bin\prog>java MathOp

Math Operations

Num1:  Num2:  Operator:

D:\Java\jdk1.8.0\_261\bin\prog>javac MathOp.java

D:\Java\jdk1.8.0\_261\bin\prog>java MathOp

Math Operations

Num1: 100 Num2: 23 Operator: %  8

D:\Java\jdk1.8.0\_261\bin\prog>javac MathOp.java

D:\Java\jdk1.8.0\_261\bin\prog>java MathOp

Math Operations

Num1: 100 Num2: 0 Operator: /  Invalid