

```
import java.awt.*;
import java.awt.event.*;

class DialogBox extends Dialog implements ActionListener {
    int DivisionID id;
```

```
DialogBox (Frame parent, String title) {
```

```
    super (parent, title, true);
```

```
    id = (IntDivisionID) parent;
```

```
    setLayout (new FlowLayout ());
```

```
    set Size (300, 300);
```

```
    add (new Label (id.msg));
```

```
    Button b;
```

```
    add (b = new Button ("OK"));
```

```
    b.addActionListener (this);
}
```

```
public void actionPerformed (ActionEvent ae) {
```

```
    dispose();
}
```

```
public class IntDivisionID extends Frame implements ActionListener {
```

```
    TextField num1, num2, result;
```

```
    String res, msg;
```

```
    Button div;
```

```
    public IntDivisionID () {
```

```
        setLayout (new FlowLayout ());
```

```
        div = new Button ("Divide");
```

```
        Label num1 = new Label ("Number 1: ", Label.RIGHT);
```

```
        Label num2 = new Label ("Number 2: ", Label.RIGHT);
```

```
        Label res1 = new Label ("Result: ", Label.RIGHT);
```

```
        num1 = new TextField (5);
```

```
        num2 = new TextField (5);
```

```
        result = new TextField (10);
```

```
        add (num1);
```

```
        add (num2);
```

```
add(div);
```

```
add(num1);
```

```
add(num2);
```

```
add(result);
```

```
add(result);
```

```
num1.addActionListener(this);
```

```
div.addActionListener(this);
```

```
num2.addActionListener(this);
```

```
addWindowListener(new WindowAdapter() {
    public void windowClosing(WindowEvent we) {
        System.exit(0);
    }
});
```

```
3
3);
```

```
3
```

```
public void actionPerformed(ActionEvent ae) {
```

```
    String s = ae.getActionCommand();
```

```
    if (s.equals("Divide"))
```

```
    { result.setText(divide());
```

```
3
3
```

```
String divide() {
```

```
    double n1, n2, n = 0;
```

```
    try
```

```
    { n1 = Integer.parseInt(num1.getText());
```

```
    n2 = Integer.parseInt(num2.getText());
```

```
3
```

```
catch (NumberFormatException ne)
```

```
{
```

```
    msg = "entered numbers must be integers";
```

```
    DialogBox d = new DialogBox(this, "Dialog");
```

```
    d.setVisible(true);
```

```
    n1 = Integer.parseInt(num1.getText());
```

```
    n2 = Integer.parseInt(num2.getText());
```

```
if (n2 == 0)
```

```
{  
    msg = "Cannot divide a number by 0";
```

```
    DialogBox d = new DialogBox(this, "Dialog");  
    d.setVisible(true);  
    return "";  
}
```

```
else
```

```
{  
    n1 = Integer.parseInt(num1.getText());  
    n2 = Integer.parseInt(num2.getText());  
    n = n1 / n2;  
    res = Double.toString(n);  
    return res;  
}
```

```
public static void main(String args[]) {  
    JDialog div = new JDialog();  
    div.setSize(new Dimension(300, 100));  
    div.setTitle("Text Field Demo");  
    div.setVisible(true);  
}
```

```
}
```


