

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

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

```
    TextField num1, num2;
```

```
    Button dResult;
```

```
    Label outResult;
```

```
    String out = "";
```

```
    double resultNum;
```

```
    int flag = 0;
```

```
    public DivisionMain()
```

```
    {
```

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

```
        dResult = new Button("RESULT");
```

```
        Label number1 = new Label("Number 1:", Label.RIGHT);
```

```
        Label number2 = new Label("Number 2:", Label.RIGHT);
```

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

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

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

```
        add(number1);
```

```
        add(num1);
```

```
        add(number2);
```

```
        add(num2);
```

```
        add(dResult);
```

```
        add(outResult);
```

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

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

```
        dResult.addActionListener(this);
```

```
        addWindowListener(new WindowAdapter()
        {
```

```
            public void windowClosing(WindowEvent we)
            {
```

```
                System.exit(0);
```

```
            }
        });
```

}

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

```
{  
    int  
    double n1, n2;
```

```
    try
```

```
{
```

```
        if (ae.getSource() == dResult)
```

```
        {  
            Integer Int n1 = Double Double . parseDouble (num1.getText());
```

```
            Integer Int n2 = Double Double . parseDouble (num2.getText());
```

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

```
                throw new ArithmeticException();
```

```
            resultNum = n1 / (double)n2;
```

```
            out = String.valueOf(resultNum);
```

```
            repaint();
```

```
        }
```

```
    }
```

```
    catch (NumberFormatException e1)
```

```
    {
```

```
        flag = 1;
```

```
        out = "Number Format Exception! " + e1;
```

```
        repaint();
```

```
    }
```

```
    catch (ArithmeticException e2)
```

```
    {
```

```
        flag = 2;
```

```
        out = "Divide by 0 Exception! " + e2;
```

```
        repaint();
```

```
    }
```

```
}
```

```
public void paint(Graphics g)
```

```
{
```

```
    if (flag == 0)
```

```
        g.drawString(out, outResult.getX() + outResult.getWidth(),  
                      outResult.getY() + outResult.getHeight() - 8);
```

```
    else
```

```
        g.drawString(out, 100, 200);
```

```
    flag = 0;
```

```
}
```

```
public static void main (String[] args) {
```

```
    DivisionMain dm = new DivisionMain();  
    dm.setSize(new Dimension(800,400));  
    dm.setTitle ("Division of Integers");  
    dm.setVisible (true);
```

```
}
```

```
}
```