

Lab-10(b)

(b)

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

```
class SampleDialog extends Dialog implements  
ActionListener {
```

```
    Division div;
```

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

```
    {
```

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

```
        div = (Division) parent;
```

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

```
        setSize(400, 150);
```

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

```
        Button b;
```

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

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

```
    }
```

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

```
    {
```

```
        dispose();
```

```
    }
```

```
}
```



```
public class Division extends JFrame implements  
ActionListener
```

```
{
```

```
String msg = " ";
```

```
String msg1 = " ";
```

```
TextField n1, n2, res;
```

```
Button b;
```

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

```
public Division()
```

```
{
```

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

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

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

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

```
n1 = new TextField(10);
```

```
n2 = new TextField(10);
```

```
res = new TextField(35);
```

```
add(num1);
```

```
add(n1);
```

```
add(num2);
```

```
add(n2);
```

```
b = (Button) add(div);
```

```
add(result);
```

```
add(res);
```

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```
n1.add ActionListener (this);  
n2.add ActionListener (this);  
b.add ActionListener (this);
```

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

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

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

```
{  
    Division appwin = new Division();  
    appwin.setSize(new Dimension(450, 180));  
    appwin.setTitle("Integer-Division");  
    appwin.setVisible(true);  
}
```

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

```
{  
    if (! (n1.getText().equals("")) && ! (n2.getText().  
                                                equals(" ")))
```

```
{  
        try
```

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```
msg1 = "" + (Integer.parseInt(n1.getText()) /  
              Integer.parseInt(n2.getText()));  
res.setText(msg1);  
}
```

```
catch (NumberFormatException e)
```

```
{
```

```
    msg = "Error : Enter only Integers!";  
    res.setText("");
```

```
    SampleDialog d = new SampleDialog(this, "Error");  
    d.setVisible(true);
```

```
}
```

```
catch (ArithmeticException e)
```

```
{
```

```
    msg = "Error : Divisor CANNOT be ZERO!";  
    res.setText("");
```

```
    SampleDialog d = new SampleDialog(this, "Error");  
    d.setVisible(true);
```

```
}
```

```
}
```

```
else
```

```
{
```

```
    msg = "ERROR : Number fields should NOT be EMPTY!";  
    res.setText("");
```

```
    SampleDialog d = new SampleDialog(this, "ERROR");  
    d.setVisible(true);
```

```
}
```

```
}
```

```
}
```

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