

LAB-10

```
import java.awt.*;

import java.awt.event.*;

public class Division extends Frame implements ActionListener {

    public class DialogD extends Frame{
        String msg;
        DDialog myDialog;

        public DialogD() {
            myDialog = new DDialog(this, "New Dialog Box", msg);
        }
    }

    String msg;

    TextField num1, num2, res;

    Label l1, l2, l3;

    Button div;

    public Division() {

        setLayout(new FlowLayout());

        l1 = new Label("Dividend",Label.RIGHT);

        l2 = new Label("Divisor", Label.RIGHT);

        l3 = new Label("Result", Label.RIGHT);

        num1 = new TextField(10);

        num2 = new TextField(10);

        res = new TextField(10);

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

```
add(l1);

add(num1);

add(l2);

add(num2);

add(l3);

add(res);

add(div);


div.addActionListener(this);

addWindowListener(new MyWindowAdapter());

}
```

```
public void actionPerformed(ActionEvent ae) {

int num1 = 0, num2 = 0;


try {

num1 = Integer.parseInt(this.num1.getText());

num2 = Integer.parseInt(this.num2.getText());

double num3 =(double) num1 / num2;


res.setText(String.valueOf(num3));

msg = "Division Successful";


} catch (NumberFormatException e) {

System.out.println(e);
```

```

res.setText("");

msg = "NumberFormatException ";

DDialog dd = new DDialog(this, "Dialog", msg);
dd.setVisible(true);
return;
}

try {

if(num2==0)

throw new ArithmeticException();

msg = "Can't be divided by Zero";

} catch (ArithmeticException e) {

System.out.println("Can't be divided by Zero" + e);

res.setText("");

msg = "Can't be divided by Zero";

DDialog dd = new DDialog(this, "Dialog", msg);
dd.setVisible(true);
return;

}

}

public void paint(Graphics g) {

g.drawString(msg, 80, 100);

}

public static void main(String[] args) {

```

```
Division appwin = new Division();
```

```
appwin.setSize(new Dimension(480,280));
```

```
appwin.setTitle("Division");
```

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

```
}
```

```
}
```

```
class MyWindowAdapter extends WindowAdapter {
```

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

```
{
```

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

```
}
```

```
}
```

```
class DDialog extends Dialog {
```

```
DDialog(Frame parent, String title, String msg)
```

```
{
```

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

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

```
setSize(300,300);
```

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

```
Button b;
```

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

```
b.addActionListener((ae)->dispose());
```

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

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

```
{
```

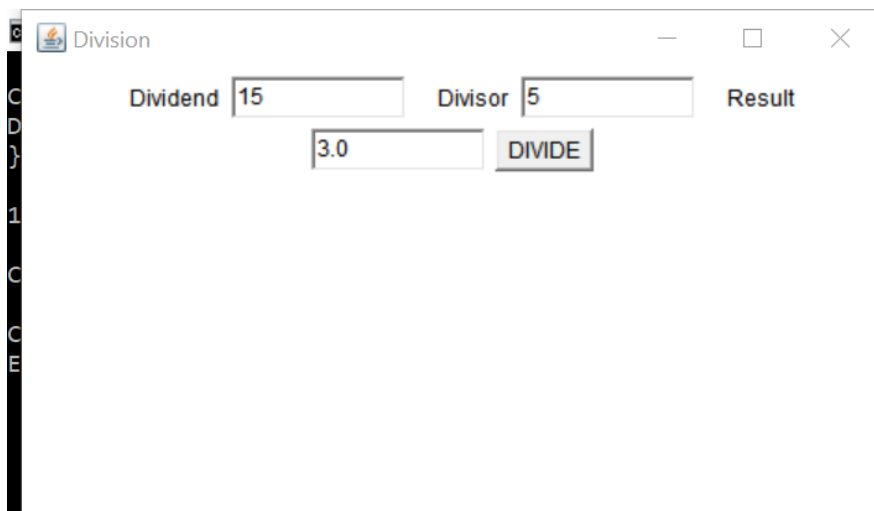
```
dispose();
```

```
}
```

```
});
```

```
}
```

```
}
```



```
Exception: String is null
```

```
at java.awt.Window.dispatchEventImpl(Unknown Source)
at java.awt.Component.dispatchEventImpl(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
```

