

22/12/20

Lab 10

```

import java.awt.*;
import java.awt.event.*;
public class Division extends Frame implements ActionListener {
    public class DialogD extends JFrame {
        String msg;
        JDialog myDialog;
        public DialogD() {
            myDialog = new JDialog(this, "New Dialog Box", msg);
        }
    }
}

```

```

String msg;
Textfield num1, num2, num3 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(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 = "Number Format Exception";
        JDialog dd = new JDialog(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";
        JDialog dd = new JDialog(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.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    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(eae -> dispose());
        addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent we) {
                dispose();
            }
        });
    }
}

```