

6. Use the Lab0 you created earlier as a starting-point for Lab1. *Follow the instructions for doing so in the Eclipse Tutorial.*

7. In this class, we will be building Java programs that employ graphical user interfaces (GUIs) using **Swing** components. As such, we will be building **JFrames**. Thus, your programs will always need the following 2 "import" statements:

```
import javax.swing.*;
import java.awt.*;
```

8. Using your new **Lab1** (that was created in Step #6 above) modify the code that appears so that it reads exactly as follows:

```
import java.awt.*;
import javax.swing.*;
public class Lab1 extends JFrame
{
    public JButton startB = new JButton("START");
    public static void main(String args[])
    {
        new Lab1();
    }
    public Lab1()
    { setTitle("POP UP WINDOW");
      add(startB);
      setBounds(200,400,200,100);
      setLayout(new FlowLayout());
      setVisible(true);
      System.out.println("Feedback on the console" + " Button 1 "+
startB.getText()); ;
    }
}
```

With these changes, when the program is executed, a **START** button will displayed on your **JFrame** window. Run your program to confirm this.

9. Next, use your intuition to create and add a 2nd **JButton** (but with a label "**HALT**" appearing on it). (NOTE - In object-oriented terminology you just created a 2nd "instance" of the **JButton** class.)

10. As you will learn in class shortly, there are many other widgets (components) that can be added to your Graphical User Interface (GUI).

11. Now, create and add a **JLabel** widget with the two lines of code given below. Type them exactly as shown. Position the **JLabel** declaration so that it appears right after the two **JButton** declarations. Place the "**add**" for the new label so that it appears BETWEEN the **HALT JButton** and the **CONTINUE JButton** "add" statements. **Note:** *When you run the Lab1 JApplet, the label should appear on your applet positioned between the 2 buttons.*

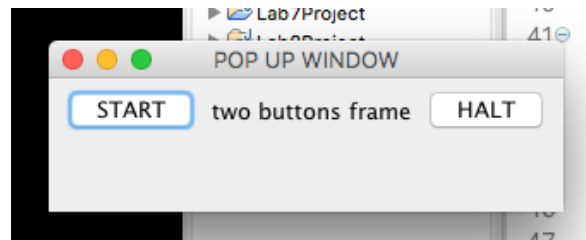
These are the two new statements that you are adding:

```
JLabel lblPress = new JLabel("Two buttons frame");  
add(lblPress);
```

12. Run Lab1. If everything has been entered correctly you should see the Applet Viewer window open with two buttons, and a label. *If you do not get that, stop here, fix your mistakes and rerun the applet until you do. Do NOT continue until this is done.*

Notice that the applet is being displayed in a window size of 200 pixels x 100 pixels.

13. Referring to Section III.8.4 of the *Eclipse Introduction tutorial*, change the **JApplet**'s size so that it appears within a window of 300 pixels x 200, your JFrame should look like this:



14. Once your program runs perfectly, remember to submit just the source code: **i.e lab1.java** for grading.