



If Blocks

- If Block
- Elself Clause



If Block

The program will take a course of action based on whether a condition is true.

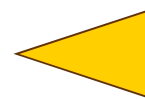
If *condition* **Then**

action1

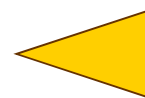
Else

action2

End If



Will be executed if
condition is true



Will be executed if
condition is false



Another example If block

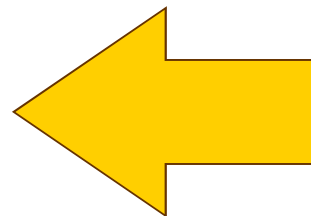
If *condition* **Then**

action1

End If

Statement2

Statement3

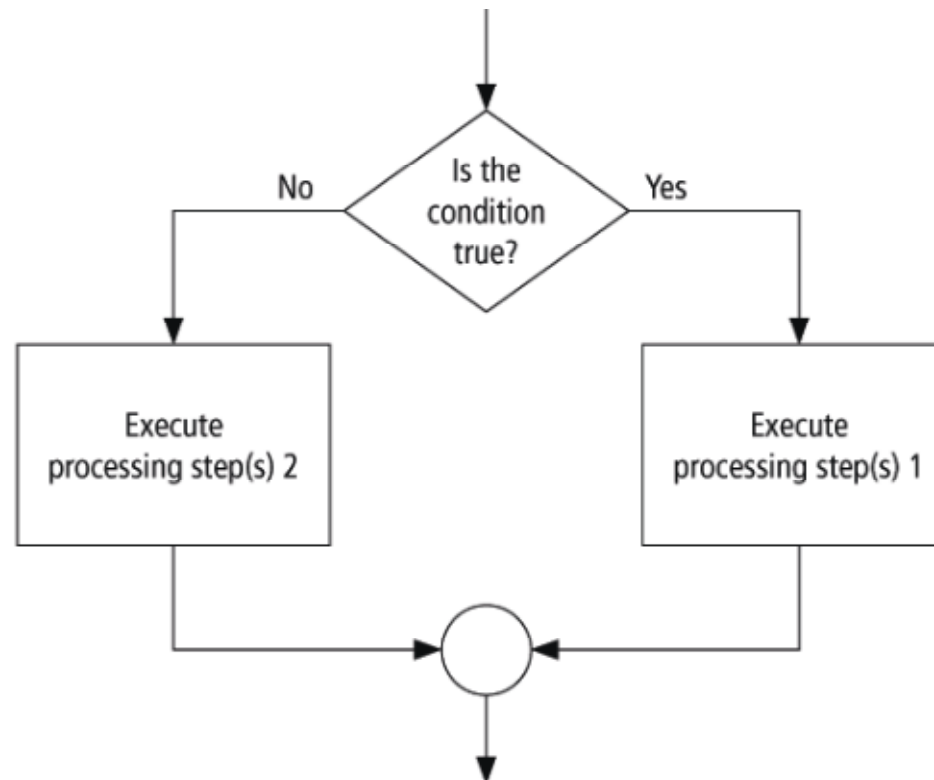


Regardless of whether
the condition in the
If statement is True or
False, these statements
will be executed



Pseudocode and Flowchart for an If Block

```
If condition is true Then  
    Processing step(s) 1  
Else  
    Processing step(s) 2  
End If
```





Lab Sheet 5.3 : Form

The screenshot shows a Windows application window titled "Maximum". Inside the window, there are two text input fields. The first is labeled "First number:" and the second is labeled "Second number:". Below these fields is a button labeled "Find Larger Number". At the bottom of the window is a larger text area. Arrows point from the following labels to these elements:

- `txtFirstNum` points to the first input field.
- `txtSecondNum` points to the second input field.
- `txtResult` points to the bottom text area.



Lab Sheet 5.3: Code

```
Private Sub btnFindLarger_Click(...) _  
    Handles btnFindLarger.Click  
    Dim num1, num2, largerNum As Double  
    num1 = Cdbl(txtFirstNum.Text)  
    num2 = Cdbl(txtSecondNum.Text)  
    If num1 > num2 Then  
        largerNum = num1  
    Else  
        largerNum = num2  
    End If  
    txtResult.Text = "The larger number is " & largerNum  
End Sub
```



Lab Sheet 5.3: Output

A screenshot of a Java Swing window titled "Maximum". The window has a blue title bar with standard minimize, maximize, and close buttons. The main area has a light beige background. It contains two text input fields: "First number:" with the value "3" and "Second number:" with the value "7". Below these is a button labeled "Find Larger Number". At the bottom, there is a text area displaying "The larger number is 7".

Maximum

First number: 3

Second number: 7

Find Larger Number

The larger number is 7



Lab Sheet 5.3: Form

A screenshot of a Windows-style application window titled "Profit/Loss". The window has a blue title bar with standard minimize, maximize, and close buttons. The main area has a light beige background. It contains two labels, "Costs:" and "Revenue:", each followed by a white text input field. Below these fields is a large, light gray button with the text "Show Financial Status". At the bottom of the window is a wide, empty white rectangular box.

Profit/Loss

Costs:

Revenue:

Show Financial Status



Lab Sheet 5.3: Code

```
If costs = revenue Then
    txtResult.Text = "Break even"
Else
    If costs < revenue Then
        profit = revenue - costs
        txtResult.Text = "Profit is " & _
                        FormatCurrency(profit)
    Else
        loss = costs - revenue
        txtResult.Text = "Loss is " & _
                        FormatCurrency(loss)
    End If
End If
```



Lab Sheet 5.3: Output

Profit/Loss [Minimize] [Maximize] [Close]

Costs:

Revenue:

Loss is \$1,500.00