

For updated version, please click on
<http://ocw.ump.edu.my>

COMPUTER PROGRAMMING

DECISION INSTRUCTION - 2

by
LIM KAR SING

FACULTY OF CIVIL ENGINEERING & EARTH RESOURCES
UNIVERSITI MALAYSIA PAHANG

limks@ump.edu.my

If Blocks

- If Block
- Nested If Blocks
- Elself Clauses

If Block

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

If *condition* **Then**

action 1

Else

action 2

End If



Will be executed if
condition is true



Will be executed if
condition is false

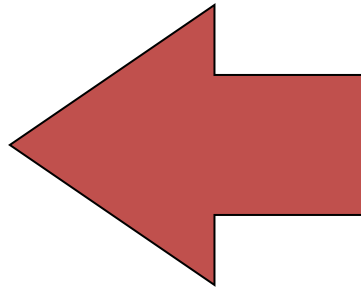
Another Type of If Block

If *condition* **Then**
action 1

End If

Statement 2

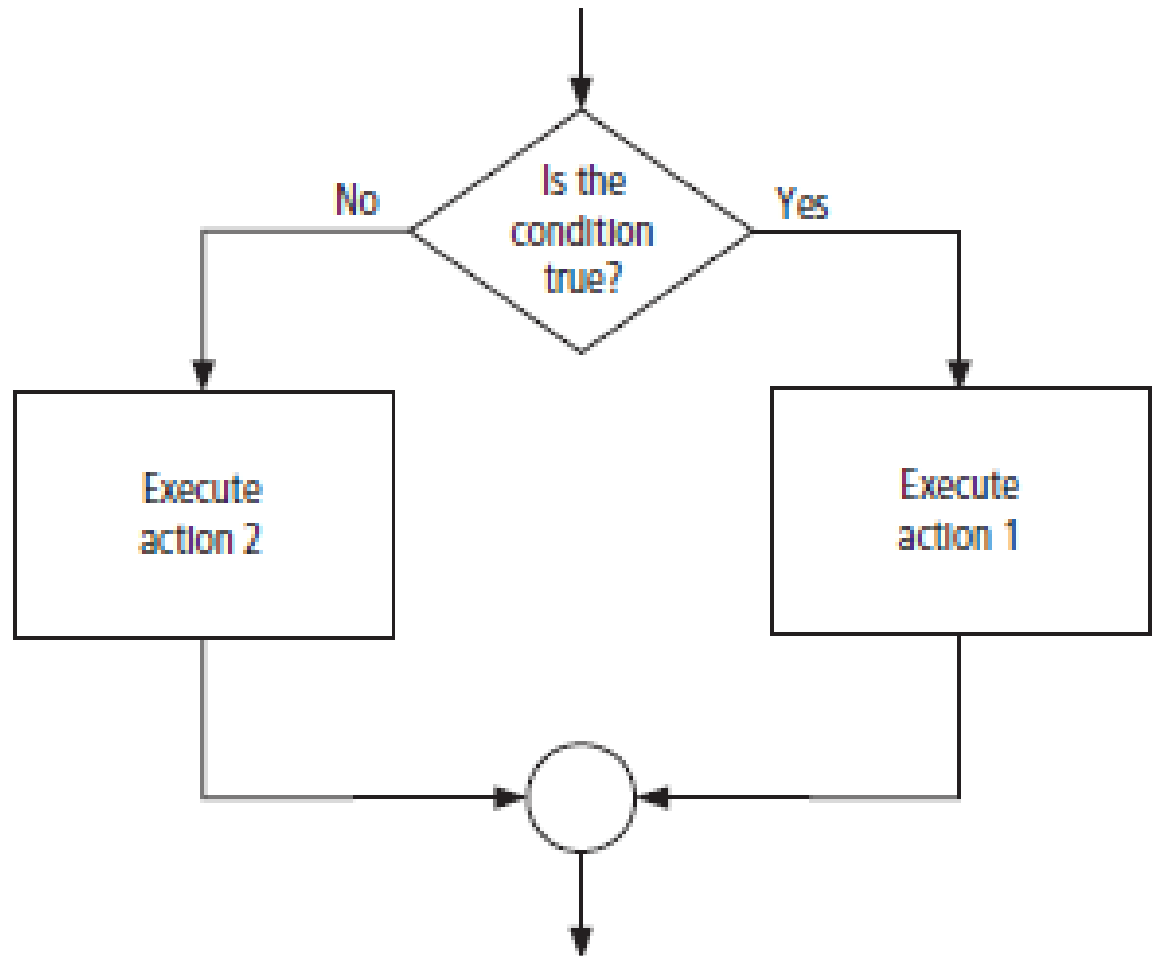
Statement 3



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  
    Execute action 1  
Else  
    Execute action 2  
End If
```



Nested If Blocks

- When one If block is contained inside another If block, the structure is referred to as **nested If blocks**.
- It is usual use if the **conditions** are more than **2**

Elseif Clause

- Use if many conditions are present in decision making

If *condition 1* **Then**

action 1

ElseIf *condition 2* **Then**

action 2

ElseIf *condition 3* **Then**

action 3

Else

action 4

End If

Simplified Nested If Statement

- Care should be taken to make If blocks easy to understand.

If *cond1* **Then**

Then

If *cond2* **Then**

action

End If

End If

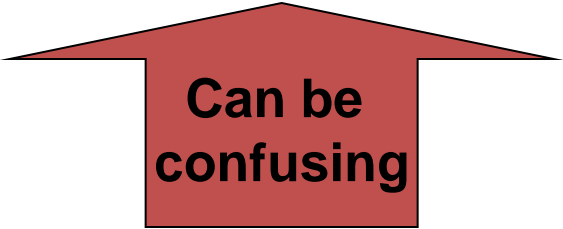
If *cond1* **And** *cond2*

action

End If



Clearer



Can be
confusing

Comment

- Some programs call for selecting among many possibilities. Although such tasks can be accomplished with complicated nested If blocks, the Select Case block (discussed in next Section) is often a better alternative.