

VBA NOTES - IF STATEMENT

Option Explicit

What is an If Statement:

The If statement is used for decision making in VBA.
It checks a condition (True/False) and executes code based on the result.

Syntax:

```
If Condition Then
    ' Code runs if condition is True
Else
    ' Code runs if condition is False
End If
```

Example 1: Simple If...Then

```
Sub IfExample1()
    Dim score As Integer
    score = 25

    If score > 50 Then
        MsgBox "Pass"
    End If
End Sub
```

Example 2: If...Then...Else

```
Sub IfExample2()
    Dim age As Integer
    age = 25

    If age >= 18 Then
        MsgBox "You are an Adult"
    Else
        MsgBox "You are a Minor"
    End If
End Sub
```

Example 3: If...ElseIf...Else

```
Sub IfExample3()
    Dim marks As Integer
    marks = 25

    If marks >= 90 Then
        MsgBox "Grade: A"
    ElseIf marks >= 75 Then
        MsgBox "Grade: B"
    ElseIf marks >= 50 Then
        MsgBox "Grade: C"
    Else
        MsgBox "Fail"
    End If
End Sub
```

Example 4: Nested If

```
-----  
Sub IfExample4()  
    Dim num As Integer  
    num = -5  
  
    If num > 0 Then  
        If num Mod 2 = 0 Then  
            MsgBox "Positive Even Number"  
        Else  
            MsgBox "Positive Odd Number"  
        End If  
    Else  
        MsgBox "Number is Zero or Negative"  
    End If  
End Sub
```

Example 5: One-Line If

```
-----  
Sub IfExample5()  
    Dim salary As Double  
    salary = 60000  
  
    If salary > 50000 Then MsgBox "High Salary"  
End Sub
```

Key Points

- If is always followed by a condition.
- ElseIf lets you check multiple conditions.
- Else runs only if no condition is True.
- Conditions use comparison operators: =, >, <, >=, <=, <>.
- Conditions can also use logical operators: And, Or, Not.