

VBA NOTES - SELECT CASE

Option Explicit

What is Select Case:

Select Case is an alternative to multiple If...ElseIf statements.
It makes the code cleaner, easier to read, and faster when checking one variable against multiple possible values.

Syntax:

```
Select Case expression
    Case Value1
        ' Code for value1
    Case Value2
        ' Code for value2
    Case value3, value4
        ' Code for multiple values
    Case Else
        ' Code if no match is found
End Select
```

expression > the variable or value being tested.

Case Else > optional, like Else in an If statement.

Example 1: Simple Select Case

```
Sub SelectCaseExample1()
    Dim dayNumber As Integer
    dayNumber = 1

    Select Case dayNumber
        Case 1
            MsgBox "Monday"
        Case 2
            MsgBox "Tuesday"
        Case 3
            MsgBox "Wednesday"
        Case 4
            MsgBox "Thursday"
        Case 5
            MsgBox "Friday"
        Case 6
            MsgBox "Saturday"
        Case 7
            MsgBox "Sunday"
        Case Else
            MsgBox "Invalid Day Number"
    End Select
End Sub
```

Example 2: Range Checking with Case

```
Sub SelectCaseExample2()
    Dim marks As Integer
    marks = 55

    Select Case marks
        Case Is >= 90
            MsgBox "Grade: A"
```

```
Case 75 To 89
    MsgBox "Grade: B"
Case 50 To 74
    MsgBox "Grade: C"
Case Else
    MsgBox "Fail"
End Select
End Sub
```

Example 3: Multiple Values in One Case

```
-----  
Sub SelectCaseExample3()
    Dim fruit As String
    fruit = "Banana"

    Select Case fruit
        Case "Apple", "Banana", "Mango"
            MsgBox "This is a Fruit"
        Case "Carrot", "Potato"
            MsgBox "This is a Vegetable"
        Case Else
            MsgBox "Unknown Item"
    End Select
End Sub
```

Example 4: Nested Select Case

```
-----  
Sub SelectCaseExample4()
    Dim num As Integer
    num = -15

    Select Case num
        Case Is > 0
            Select Case num Mod 2
                Case 0
                    MsgBox "Positive Even Number"
                Case 1
                    MsgBox "Positive Odd Number"
            End Select
        Case Else
            MsgBox "Zero or Negative"
    End Select
End Sub
```

Key Points

- Select Case is best when testing one variable against many values.
- Can use ranges (To) and comparisons (Is >=).
- Cleaner than multiple If...ElseIf conditions.
- Case Else ensures code runs when no case matches.