

# If...Then...Else Statement

Conditionally executes a group of [statements](#), depending on the value of an [expression](#).

The syntax is:

```

If condition Then
    statements

[ElseIf condition-n Then
    statements]...

[Else
    statements]

End If
  
```

The result of the condition is Boolean. The condition can take one of the following forms:

- Compare variable with other variable like (A > B).
- Boolean variable like (Flag = True or False)

If Flag then

Statement(s)

[Else

Statement(s)]

- Function that result (True or False) like (Isnumeric(), Isempty(), ...,etc).

## Example 1

Write a program to print “Old” if the age more than 30, while the program print “Young” if the age less than 30.

```

Private Sub Cmdage_click()
    Dim Age As Integer
    Age = Val(txtage.text)
    If (Age > 30) then
        Lblres.Caption="Old"
    
```

Object	Property	Value
Command	Name	Cmdage
Label	Name Caption	lblres Result
Text Box	Name	txtage

```
Else
Lblres.Caption="Young"
End If
End Sub
```

Example 2

Write a program to find the total price when a person bought more than 30 pins, the price of pin will be 300 ID, while if the person bought less than 30 pins the price will be 500 ID.

```
Private Sub Cmdtot_click()
    Dim PinNumAs Integer
    Dim TotalPriceAs Long
    PinNum = Val(txtpin.text)
    If (PinNum >= 30) then
        TotalPrice = PinNum * 300
    Else
        TotalPrice = PinNum * 500
    End If
    Lblres.Caption="TotalPrice"
End Sub
```

Object	Property	Value
Command	Name	Cmdtot
Label	Name Caption	lblres Result
Text Box	Name	txtpin

Example 3

Write a program to find (Z) from the following equations.

$$Z = X + Y \quad \text{IF } X > Y$$

$$Z = X^3 + Y \quad \text{IF } X = Y$$

$$Z = Y + 2X \quad \text{IF } X < Y$$

```
Private Sub CmdZ_Click()
    Dim X as integer
    Dim Y as integer
    Dim Z As Integer
    X = Val(txtx.Text)
    Y = Val(tyty.Text)
```

Object	Property	Value
Command	Name Caption	CmdZ Find Z
Label	Name Caption	lblres Result
Text Box	Name	Ttxtx
Text Box	Name	Tyty

```

If (X > Y) Then
Z = X + Y
ElseIf (X = Y) Then
Z = (X ^ 3) + Y
Else
Z = Y + (2 * X)
End If
lblres.Caption = Z
End Sub

```

Example 4

Write a program to find the larger number from three numbers.

```
Private Sub Cmdlar_Click()
```

```

Dim X as integer
Dim Y as integer
Dim Z As Integer
X = Val(Txtx.Text)
Y = Val(Txty.Text)
Z = Val(Txtz.Text)

```

```

If (X > Y) And (X > Z) Then
lblres.Caption = X

```

```

ElseIf (Y > X) And (Y > Z) Then
lblres.Caption = Y
Else
lblres.Caption = Z
End If
End Sub

```

Object	Property	Value
Command	Name	Cmdlar
	Caption	Larger
Label	Name	lblres
	Caption	Result
Text Box	Name	Ttxt
Text Box	Name	Txty
Text Box	Name	Txtz

**Example** Write a program to print any name starting only with character "b".

```
Private sub cmdprt_click()
Dim n as string
Dim bname as string
N=text1.text
bname=left(n,1)
if bname="b" then
Lblres.caption=n
End if
End sub
```

Object	Property	Value
Command	Name Caption	Cmdprt Print name
Label	Name Caption	lblres Result
Text Box	Name	TxtName

**H.W.** write a VB program to find Y, where

$$Y = 1 + \frac{x^2}{\sqrt{x}} \text{ if } x > 0$$

$$Y = 1 + \frac{x^3}{|x|} \text{ if } x < 0$$

**H.W**

Find Y from the following equation:

$$Y = 1 \quad \text{IF } X < 0$$

$$Y = 4X^2 + 5 \quad \text{IF } 0 \leq X \leq 1$$

$$Y = 5X^3 + 3X \quad \text{IF } X > 1$$