Al-Mustaqbal University

College of Engineering and Technology

Department of Medical Instrumentation Techniques Engineering

Class: Second Class

Subject: Computer Applications/2

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Lecture Address: Loop statement

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Loop statement:

Visual basic supports statement to perform loops. The loops statement could Have different structures as follows:

1- Unconditional loop.

2- Conditional loop.

- ### Unconditional loop:

Loops apply programming statements for fixed number of times using counter

(for… next) statement.

The standard form is:

For Index = Initial to final step-size

One or more Statement(s)

Next [Index]

Example1: Write a program to print (hello) five times.

Sol:

Dim i as integer

For i = 1 To 5

ListBox1.Items.Add("hello")

Next

End Sub

Example2: Write a program to print even numbers from 1 to 10.

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Sol:

Dim i as integer

For i = 2 To 10 step 2

ListBox1.Items. Add (i)

Next i

End Sub

Example3: Write a program to print numbers from 1 to 10 by using

For…Next loop function.

- **Conditional loop**

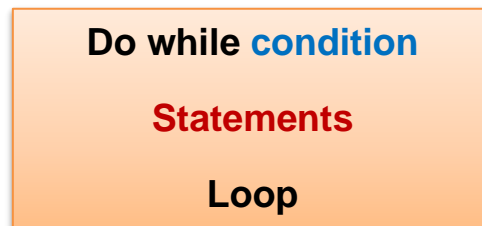Loops repeat programming statements according to specific condition.

There are two types of conditional loop:

1- Do while

2- Do until

- **Do while loop:** In this loop the statements will be implemented and repeated whenever the condition satisfied.

The standard form is:

Do while condition

Statements

Loop

Example4: Write a program to print (hello) five times with its number using do-while loop.

Sol:

Dim i as integer

i = 1

Do while i <= 5

ListBox1.Items. Add ("hello")

i = i + 1

Loop

End Sub

Example4: Write a program to print even numbers from 1 to 10.

Sol:

Dim i as integer

i = 2

Do while i <= 10

ListBox1.Items. Add (i)

i = i + 2

loop

End Sub

Example: Write a program to print numbers from 1 to 10 by using **Do While loop** function.

- **Do until loop:** In this loop the statements will be implemented and repeated until the condition satisfied (the loop will **stop** when the condition satisfied).

The standard form is:

Do Until condition

Statements
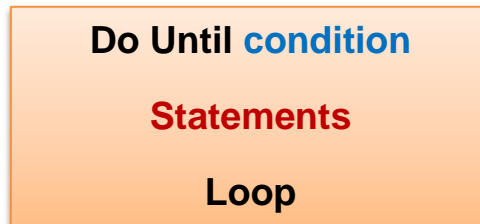
Loop

Example: Write a program to print (hello) five times by using do-until loop.

Sol:

Dim i as integer

i = 1

Do while i > 5

ListBox1.Items. Add ("hello")

i = i + 1

Loop

End Sub

Example: Write a program to print numbers from 1 to 10 by using **Do Until loop** function.

W.H:

Q1: Write a program to enter the value of two variables (X and Y). Find and print the maximum value for two variables. Design form window.

Q2: Design a form and write code to find the summation of even numbers (from 0 to 100) (use while).

Q3: Design a form and write code to find the summation of odd numbers (from 0 to 100).

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