

Do Until:

As an alternative approach to nesting an If-Statement inside the loop, and invoking (Exit Do) once we're done looping, Visual Basic provides a (Do Until) statement. Its syntax is the following:

Do Until (Expression)

(Code to execute)

Loop

(Expression) can be any legal logical expression that we wish to evaluate to determine whether or not to exit the loop. Each time the program reaches Loop it will evaluate this expression. If the expression is True, it will exit the loop for us, but otherwise it will continue looping. For more understanding let us try to write codes for the examples below:

Ex: Write a program that is able to print the numbers (0, 32, 64, 96, 128, 160, 192, 224, 256, 288) on the form vertically, use the font (Times New Roman), (Bold) with the size (14). Use Do Until... Loop statement.

- 1- Design part: No design part for such example.
- 2- Coding part: The coding part might be written as below:

```
Private Sub Form_Activate( )
```

```
Font.Name = "times new roman"
```

```
Font.Bold = True
```

```
Font.Size = 14
```

```
cnt = 1
```

```
x = 0
```

Print x

x = 32

Do Until cnt > = 10

Print x

x = x + 32

cnt = cnt + 1

Loop

End Sub

Ex: Write a program that is able to print the numbers (0, 9, 93, 96, 99, 102, 105, 201, 206, 211, 216, 221) on the form vertically, use the font (Tahoma), (Bold) with the size (16). Use Do Until... Loop statement.

- 1- Design part: No design part for such example.
- 2- Coding part: The coding part might be written as below:

```
Private Sub Form_Activate( )
```

```
Font.Name = "Tahoma"
```

```
Font.Bold = True
```

```
Font.Size = 16
```

```
cnt = 1
```

```
x = 0
```

```
Print x
```

x = 9

Print x

x = 93

Do Until cnt > = 6

Print x

x = x + 3

cnt = cnt + 1

Loop

x = 201

cnt = 1

Do Until cnt > = 6

Print x

x = x + 5

cnt = cnt + 1

Loop

End Sub

Ex: Write a program that is able to print the numbers (99, 86, 73, 60, 47, 34, 21, 8, -5) on the form vertically, use the font (Tahoma), (Bold) with the size (16). Use Do Until... Loop statement.

- 1- Design part: No design part for such example.
- 2- Coding part: The coding part might be written as below:

```
Private Sub Form_Activate( )
```

```
Font.Name = "tahoma"
```

```
Font.Bold = True
```

```
Font.Size = 16
```

```
cnt = 1
```

```
x = 99
```

```
Do Until cnt >= 10
```

```
Print x
```

```
x = x - 13
```

```
cnt = cnt + 1
```

```
Loop
```

```
End Sub
```