

Non-Conditional Repeating

For ... Next loop:

The For - Next loop is also known as a counting loop. It is an ideal loop structure when the number of iterations is known. It always contains a loop variable that works like a counter. The loop will run continually until the condition is false or till the condition is true.

```
Dim i As Integer
```

```
For i = 1 To 10
```

```
code
```

```
Next i
```

This code will loop 10 times.

Example1: Design a **List Box** includes an interval of years from **1960** to **2013** using **For – Next** loop.

Solution: Code:

```
Dim a As Integer
```

```
Form1:
```

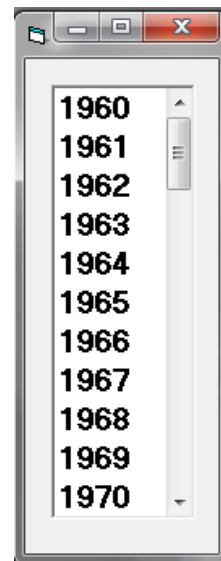
```
Private Sub Form_Load()
```

```
For a = 1960 To 2013
```

```
List1.AddItem (a)
```

```
Next
```

```
End Sub
```



Example2: Design a **Combo Box** includes an interval of years from **1960** to **2013** using **For – Next** loop.

Solution: Code:

Dim a As Integer

Form1:

Private Sub Form_Load()

For a = 1960 To 2013

Combo1.AddItem (a) Next

End Sub



Example3: write a program to print (**welcome**) ten times. Then make the **color** changed and the **size** bigger at each time.

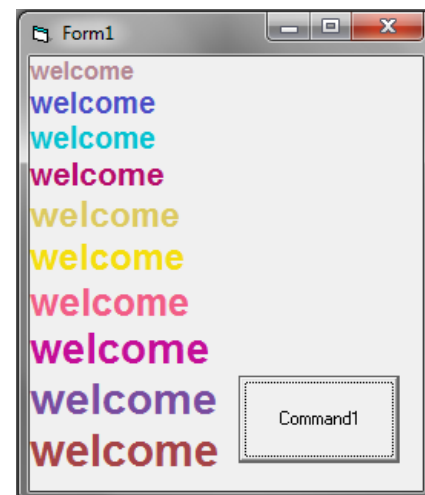
Solution:

Code:

Dim i As Integer

Private Sub Command1_Click()

For i = 1 To 10



Font size start from 12 then increase
step by step until reach 22

```
Form1.FontSize = 12 + i
```

```
Form1.ForeColor = RGB(Rnd * 255, Rnd * 255, Rnd * 255)
```

```
Print "welcome"
```

Means **Print** in the Form

```
Next i
```

```
End Sub
```

Example4: Show the **Even** number from (0) to (20) in a **List Box**, and **Odd** number from (21) to (40) in a **Combo Box**.

Solution:

Code:

```
Dim i, j As Integer
```

Command1:

```
Private Sub Form_Load( )
```

```
For i = 0 To 20 Step 2
```

```
List1.AddItem ( i )
```

```
Next
```

```
For j = 21 To 40 Step 2
```

```
Combo1.AddItem ( j )
```

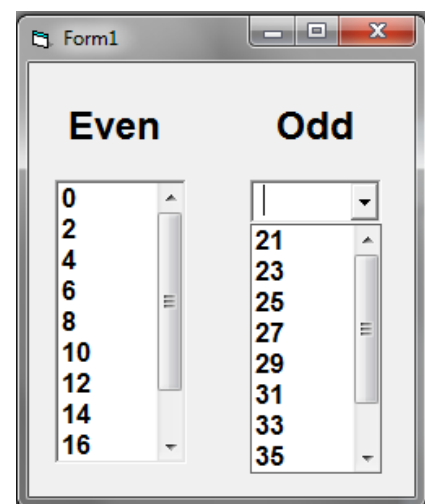
```
Next
```

```
End Sub
```

Because we start from 21 then **step 2**
means displaying only **Odd**.

Another solution

```
For j = 21 To 40
If j Mod 2 < > 0 Then
Combo1.AddItem ( j )
End If
Next j
```



Example5: write a program to print the multiplication table.

Solution:

1*1=1	1*2=2	1*3=3	1*4=4	1*5=5	1*6=6	1*7=7	1*8=8	1*9=9	1*10=10
2*1=2	2*2=4	2*3=6	2*4=8	2*5=10	2*6=12	2*7=14	2*8=16	2*9=18	2*10=20
3*1=3	3*2=6	3*3=9	3*4=12	3*5=15	3*6=18	3*7=21	3*8=24	3*9=27	3*10=30
4*1=4	4*2=8	4*3=12	4*4=16	4*5=20	4*6=24	4*7=28	4*8=32	4*9=36	4*10=40
5*1=5	5*2=10	5*3=15	5*4=20	5*5=25	5*6=30	5*7=35	5*8=40	5*9=45	5*10=50
6*1=6	6*2=12	6*3=18	6*4=24	6*5=30	6*6=36	6*7=42	6*8=48	6*9=54	6*10=60
7*1=7	7*2=14	7*3=21	7*4=28	7*5=35	7*6=42	7*7=49	7*8=56	7*9=63	7*10=70
8*1=8	8*2=16	8*3=24	8*4=32	8*5=40	8*6=48	8*7=56	8*8=64	8*9=72	8*10=80
9*1=9	9*2=18	9*3=27	9*4=36	9*5=45	9*6=54	9*7=63	9*8=72	9*9=81	9*10=90
10*1=10	10*2=20	10*3=30	10*4=40	10*5=50	10*6=60	10*7=70	10*8=80	10*9=90	10*10=100

Multiply

Code:

Dim i, j, k As Integer

Command1:

Private sub command1_click ()

لدينا ارقام من (١) الى (١٠) مضروبة بأرقام من (١) الى (١٠)

For i = 1 To 10

For j = 1 To 10

K تمثل حاصل الضرب

k = i * j

Print i; " "; j; "="; k,

print تمثل عملية الطباعة في الفورم وهذه الخطوة $i*j=k$ تعني اطبع لفارزة () عدم ترك مسافة بين الرموز او العمليات عند الطباعة والفارزة () تعني ترك مسافة بعد طباعة حاصل الضرب

Next j

Print

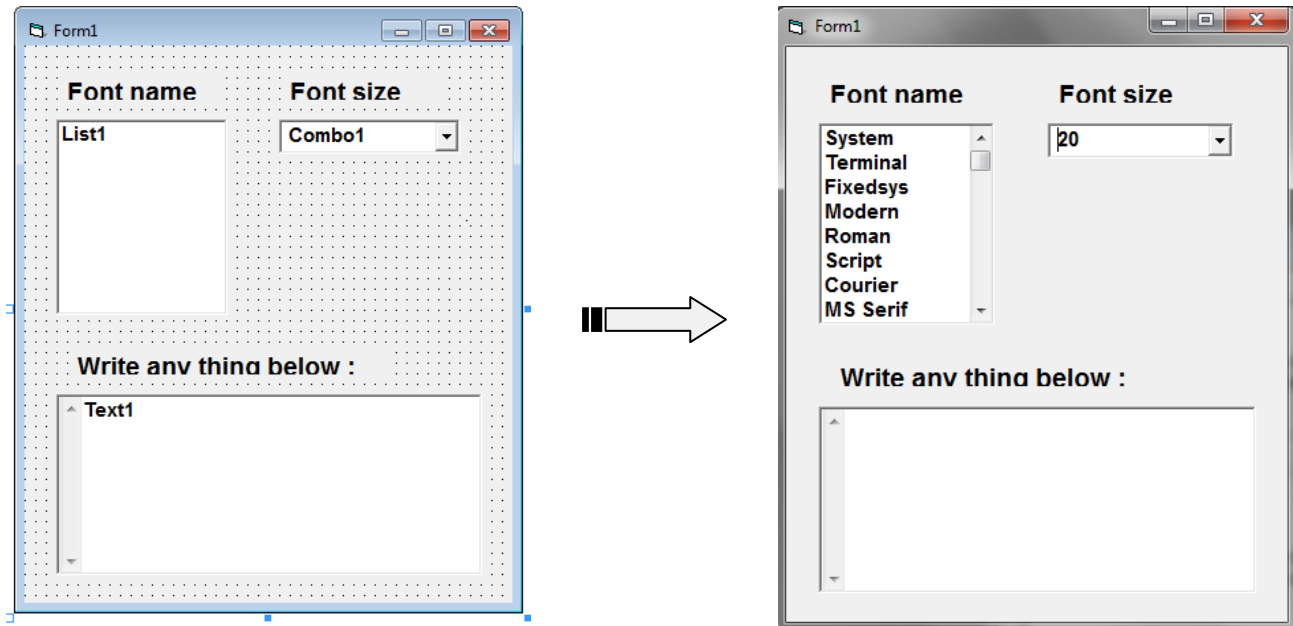
Next i

End Sub

تعني ان نكرر الارقام من () الى الرقم () لكل () كلمة نضعها هنا للدلالة على الطباعة سطر تحت سطر لأنه اذا اكتفينا بكلمة () الاولى سيقوم البرنامج بالطباعة بشكل افقي

Example6: Using **For – Next** method write a program includes (**Font names**) in a **List Box**, (**Font size**) in a **Combo Box** and as will as you write anything in a **Text Box** then the style should be changed.

Solution:



Code:

Dim i as integer

Form1:

```
Private Sub Form_Load()
```

```
  For i = 8 To 100
```

Means (**Font size**) starts from (8) till (100)

```
  Combo1.AddItem i
```

```
  Next i
```

Special code imports (**Font names**) stored in the system.

```
  For i = 0 To Screen.FontCount
```

```
  List1.AddItem Screen.Fonts(i )
```

Repeat the (**Font names**) in the **List Box**

```
  Next i
```

```
End Sub
```

List1:

```
Private Sub List1_Click()
```

```
Text1.FontName = List1.Text
```

```
End Sub
```

Means any selection in the **List Box** will act in the **Text Box**.

combo1:

```
Private Sub Combo1_Click()
```

```
Text1.FontSize = Val(Combo1.Text)
```

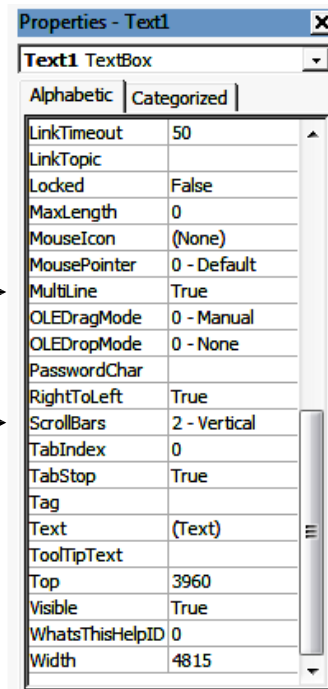
```
End Sub
```

Means any selection in the **Combo Box** will act in the **Text Box**.

Note: Change the following in the **Text Box** properties.

MultiLine = True →

ScrollBars = Vertical →



Questions:

1. find the **summation** of **Even** numbers (from **0** to **1000**).
2. find the **summation** of **Odd** numbers (from **0** to **1000**).