Example3: **Write a Visual Basic program to execute the following:**

1- Print the numbers from 0 to 10 of increased size and changed color.

2- Print the multiplication table of 5.

3- Print the multiplication tables.

Sol.:

1- ** To print the numbers from 0 to 10 there are four ways as follows**

A-Without Counter.

B-Using For-Next statement.

C-Using Do-While statement.

D-Using Do-Until statement.

-   **Create four controls elements of type Command Button and format its properties as shown in the table below:**

Command1		Command 2		Command 3		Command 4	
Name	Command1	**Name**	Command2	**Name**	Command3	**Name**	Command4
Caption	W/O Counter	**Caption**	For	**Caption**	Mult. Table 5	**Caption**	Mult. Tables

Notes:

- The font size starts from font 8 to font 30. To format the font size of Form1, you must write the following code:
  Form1.FontSize= 10, 11,…. (any font size)

- The forecolor of the Form1 can be obtained using the function:
  QBColor(0,1,2,…..)
  Form1. ForeColor= QBColor(1,2,…..)

The forecolor is a property of writing font color.

- To print on the Form1 as follows:
  To print a number, use the following form:

Form1.Print 0,1,2,….

To print a name, use the following form:

Form1.print "ali"

- To clear the Form1 as follows:
  Form1.Cls

1-A- Without Counter

Double click on the first CommandButton Command1 to enter to the Code Window and write the following coding statements

Private Sub Command1_Click()

Form1.Cls

Form1.FontSize=10

Form1.ForeColor=QBColor(0)

Form1.Print 0

Form1.FontSize=11
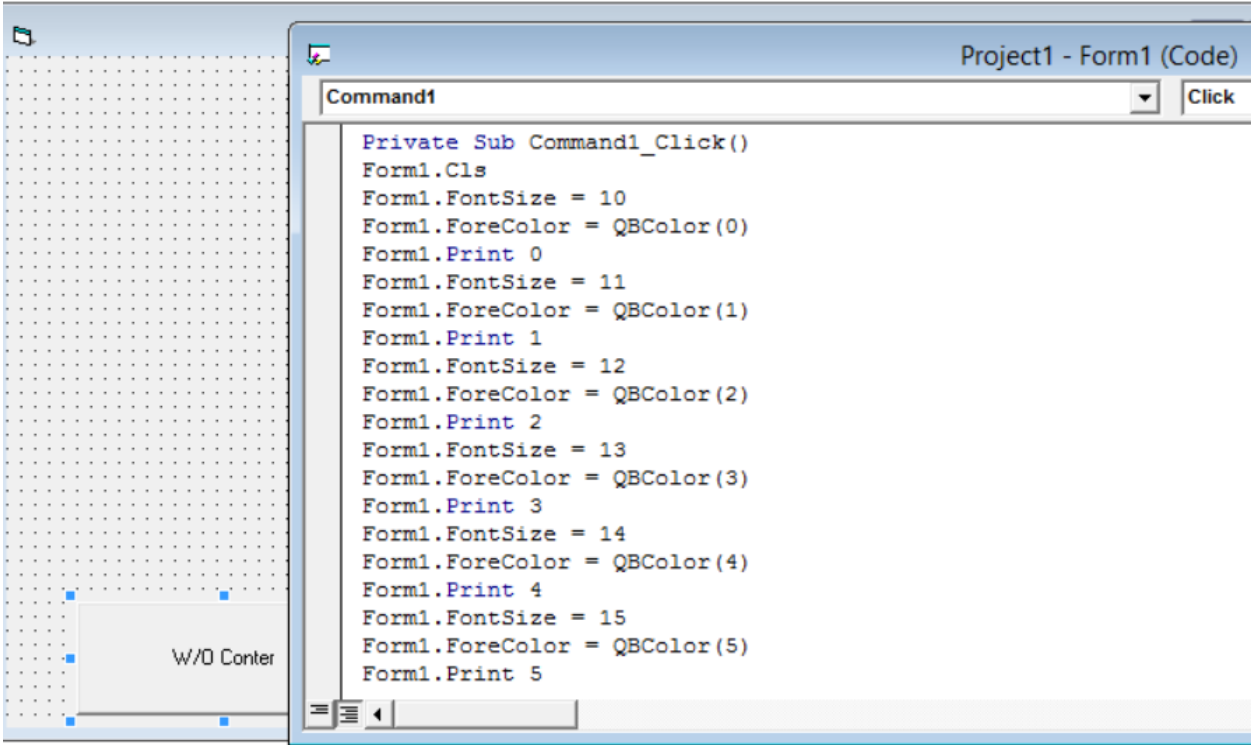
Form1.ForeColor=QBColor(1)

Form1.Print 1

.

.

Form1.FontSize=20

Form1.ForeColor=QBColor(10)

Form1.Print 10

End Sub

The Code of W/O Counter Method

```
Project1 - Form1 (Code)
Command1                                          ▼   Click
    Private Sub Command1_Click()
    Form1.Cls
    Form1.FontSize = 10
    Form1.ForeColor = QBColor(0)
    Form1.Print 0
    Form1.FontSize = 11
    Form1.ForeColor = QBColor(1)
    Form1.Print 1
    Form1.FontSize = 12
    Form1.ForeColor = QBColor(2)
    Form1.Print 2
    Form1.FontSize = 13
    Form1.ForeColor = QBColor(3)
    Form1.Print 3
    Form1.FontSize = 14
    Form1.ForeColor = QBColor(4)
    Form1.Print 4
    Form1.FontSize = 15
    Form1.ForeColor = QBColor(5)
    Form1.Print 5
```

W/O Conter

After execution

Form1

```
0
1
2
3
4
5
6
7
8
9
10
```

W/O Conter
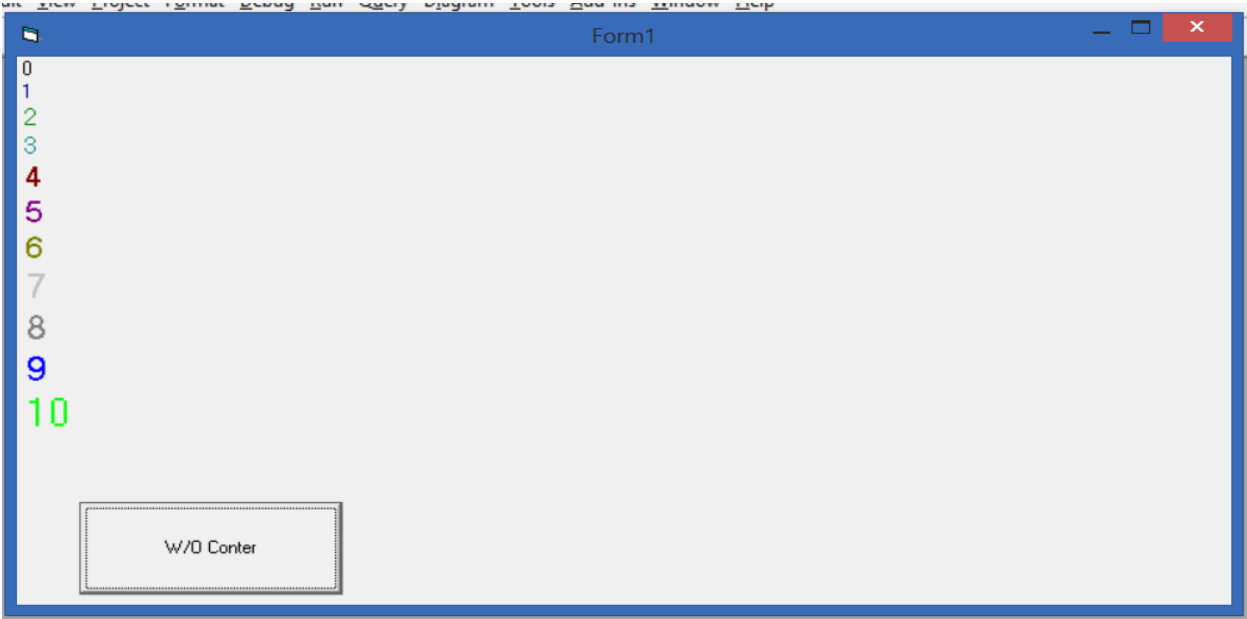
Note: Visual Basic arranges (by default) the numbers vertically at the left edge of the form.
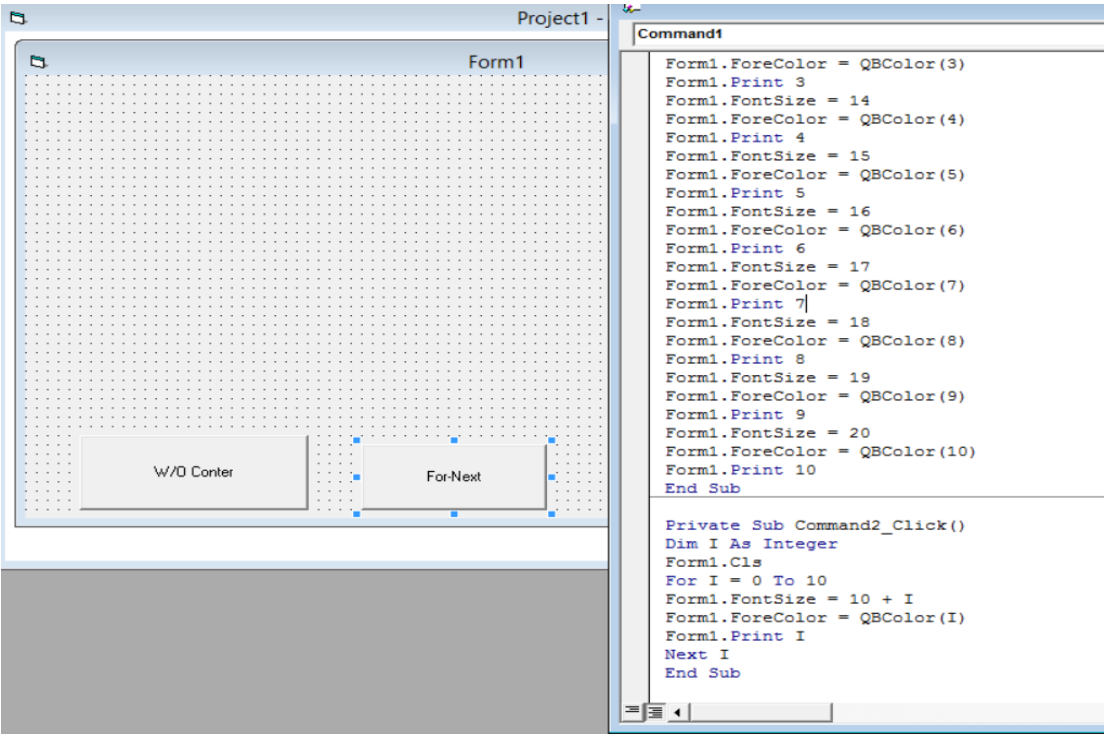
1-B-Using For-Next statement.

Double click on the second CommandButton Command2 to enter to the Code Window and write the following coding statements:

Private Sub Command2_Click()

Form1.Cls

Dim I as Integer

For I=0 to 10

Form1.FontSize=10+I

Form1.ForeColor=QBColor(I)
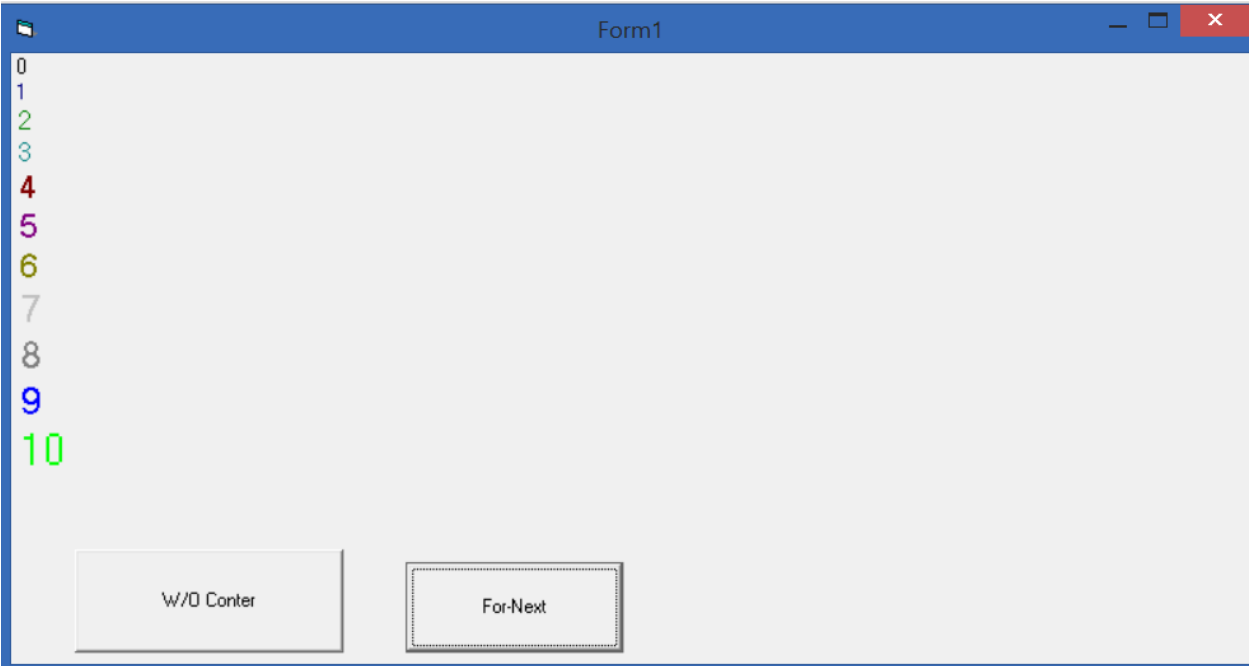
Form1.Print I

Next I

End Sub

Notes:
- **Dim : is a function to define any variable.**
- **The counter code is written as follows:**

  For counter=start to end [Step number]
  Statements
  Next counter
- **counter : is a variable.**
- **start : is the initial value of the loop.**
- **end : is the end value of the loop.**
- **step : can be positive (increasing if the start lower than end) or negative (decreasing if the start greater than end), and it equal to one if it is not mentioned.**

The Code of For - Next Method

```
Command1
    Form1.ForeColor = QBColor(3)
    Form1.Print 3
    Form1.FontSize = 14
    Form1.ForeColor = QBColor(4)
    Form1.Print 4
    Form1.FontSize = 15
    Form1.ForeColor = QBColor(5)
    Form1.Print 5
    Form1.FontSize = 16
    Form1.ForeColor = QBColor(6)
    Form1.Print 6
    Form1.FontSize = 17
    Form1.ForeColor = QBColor(7)
    Form1.Print 7
    Form1.FontSize = 18
    Form1.ForeColor = QBColor(8)
    Form1.Print 8
    Form1.FontSize = 19
    Form1.ForeColor = QBColor(9)
    Form1.Print 9
    Form1.FontSize = 20
    Form1.ForeColor = QBColor(10)
    Form1.Print 10
    End Sub

    Private Sub Command2_Click()
    Dim I As Integer
    Form1.Cls
    For I = 0 To 10
    Form1.FontSize = 10 + I
    Form1.ForeColor = QBColor(I)
    Form1.Print I
    Next I
    End Sub
```

After execution

2- Double click on the third CommandButton Command3 to enter to the Code Window and write the following coding statements:

Private Sub Command3_Click()

Form1.Cls

Dim I as Integer

Form1.FontSize=12

Form1.ForeColor=QBColor(0)

For I=1 to 10

Form1.Print I ; " x 5=" ; I*5

Next I

End Sub

```
Form1
1 x 5= 5
2 x 5= 10
3 x 5= 15
4 x 5= 20
5 x 5= 25
6 x 5= 30
7 x 5= 35
8 x 5= 40
9 x 5= 45
10 x 5= 50


    W/O Conter          For-Next          Mult. Table 5
```
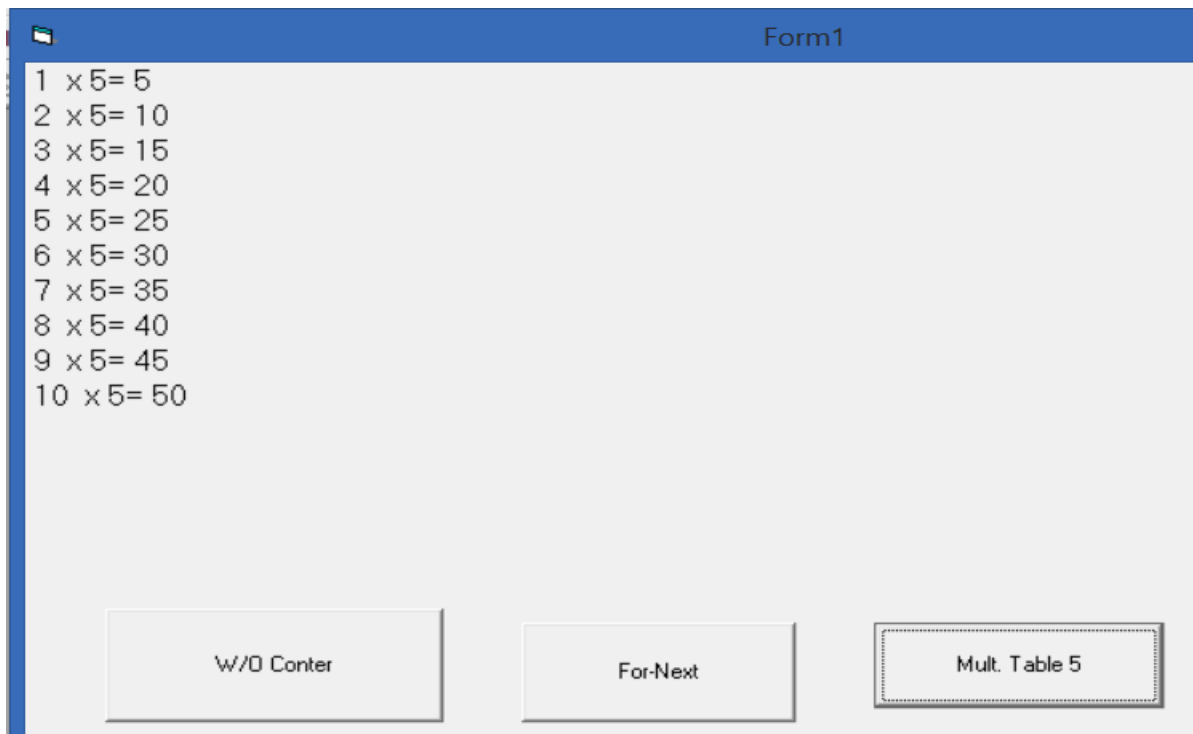
- **To specify the position of any character on the Form by using function of coordinates (Current X, Current Y)**

The X coordinate is ranged from 0 to the width of the Form

The Y coordinate is ranged from 0 to the height of the Form

*twip : is the unite in VB……576 twip = 1 cm

- In order to make the printing located at the middle of the form, you should write the code as follow:

Dim I as Integer

Form1.Cls

Form1.FontSize=12

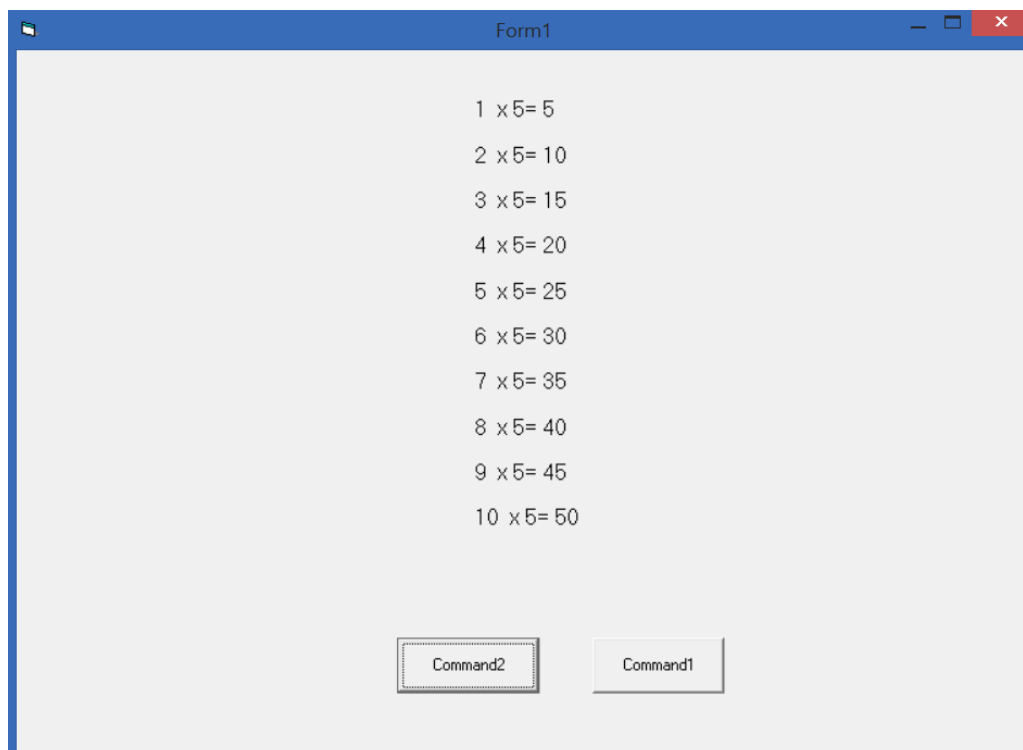**Form1.ForeColor=QBColor(0)**

For I=1 to 10

Form1.current x = 5000

Form1.current y=i*500

Form1.Print I ; " x 5=" ; I*5

Next I

End Sub

```
Form1

1  x 5= 5
2  x 5= 10
3  x 5= 15
4  x 5= 20
5  x 5= 25
6  x 5= 30
7  x 5= 35
8  x 5= 40
9  x 5= 45
10  x 5= 50

         Command2        Command1
```

3-Double click on the fourth CommandButton Command4 to enter to the Code Window and write the following coding statements:

Private Sub Command4_Click()

Dim i as Integer, j as Integer

Form1.Cls

Form1.FontSize=10

For i=1 to 10

Form1.ForeColor=QBColor(i)

For j=1 to 10

Form1.CurrentX=1000*i

Form1.CurrentY=500*j

Form1.Print   j ; "×" ; I ; "=" ; i*j

Next j

Next i

End Sub