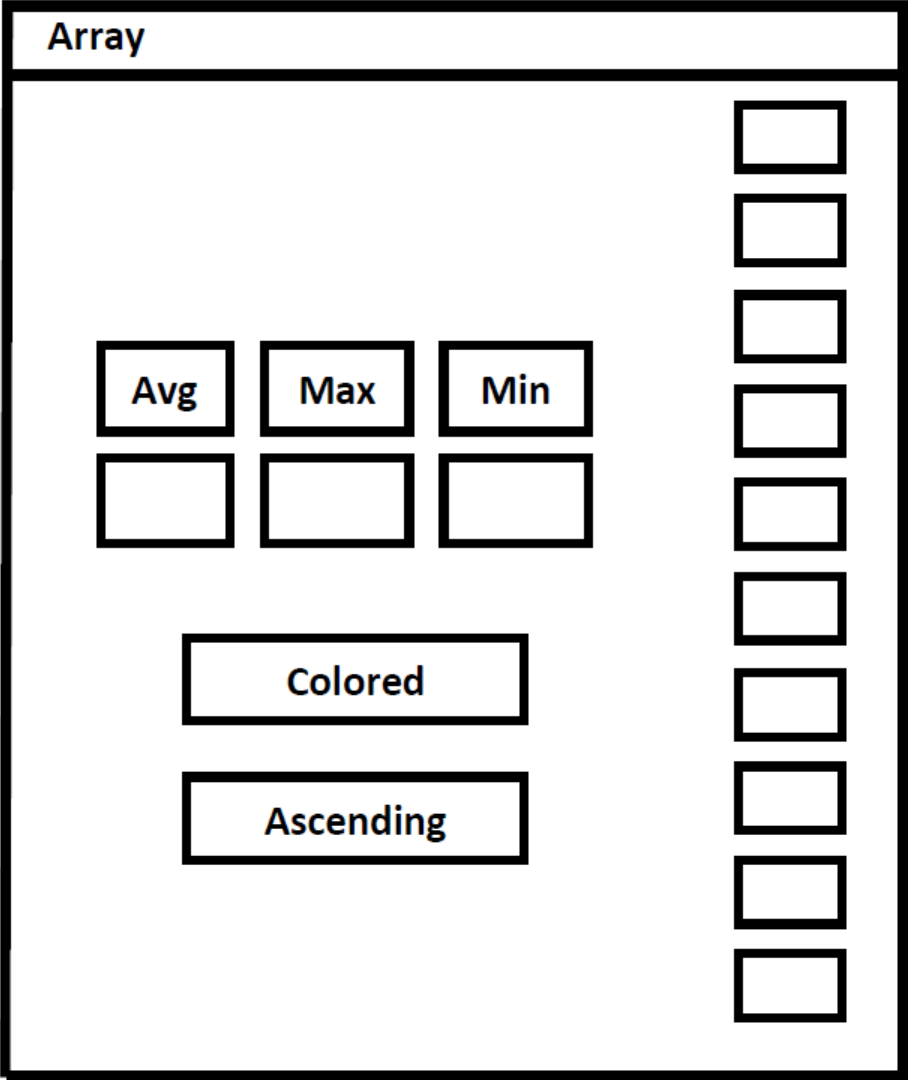**Example4:** **Write a Visual Basic program to build a system for input 10 numbers and find the following: (The profile is shown below)**

 1-The average of these numbers.

2-The maximum of these numbers.

3- The minimum of these numbers.

4-Arrange the numbers ascending.

5-Colored the even and odd value differently.

Array

Avg	Max	Min

Colored

Ascending

Sol.:

1-Create 1 TextBox with the following properties

Text 1	
Name	N
Text	
Index	

Notes:

- **In order to create ten textboxes with the same name and properties, you should use "array" property.**

- **Array can be created by doing the following steps:**

a- create one text box and named it by any name such as (N).

b- copy the text box which was done in step (a) and paste it in the form 9 times. When you paste this textbox the following message will appear

(**you already have a control named(N). do you want to create a control array?**)

press OK,.

** notice that the property **Index** will be activated in the textboxes of the array. And the controls will named (N(0)…N(1)….N(2)….etc)

3-Create 3 TextBoxes of Name (TxtAvg, TxtMax, TxtMin)

4-Create 5 CommandButtons of caption (AVG, MAX, MIN, Ascending, Colored).

5- writing the code:

5-1: print the following code in (AVG)

Dim i As Integer, S As Single

S=0

For i = 0 To 9

S = S + Val (N(i) .Text)

Next i

TxtAvg.Text = S / 10

5-2: print the following code in (max)

```
Dim i As Integer, Max As Single

Max = Val (N(0) . text )

For i = 1 To 9

If Val (N(i).text ) > Max Then

Max = Val (N(i).text )

End If

Next i

TxtMax.Text = Max
```

5-3: print the following code in (MIN)

```
Dim i As Integer, Min As Single

Min = Val (N(0).text )

For i = 1 To 9

If Val ( N(i).text ) < Min Then

Min = Val (N(i).text )

End If

Next i

TxtMin.Text = Min
```

5-4 print the following code in (Ascending)

Dim i As Integer, j As Integer, x as single

For i = 0 To 9

For j = i + 1 To 9

If Val(N(j).text) < Val(N(i).text) Then

x = N(j).text

N(j).text = N(i).text

N(i).text = x

End If

Next j

Next i

5-5: Then print the following code in (Colored)

Dim i As Integer

For i = 0 To 9

If Val(N(i).text) Mod 2 = 0 Then

N(i).ForeColor = QBColor(4)

Else

N(i).ForeColor = QBColor(1)

End If

Next i