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# COMPUTER PROGRAMMING

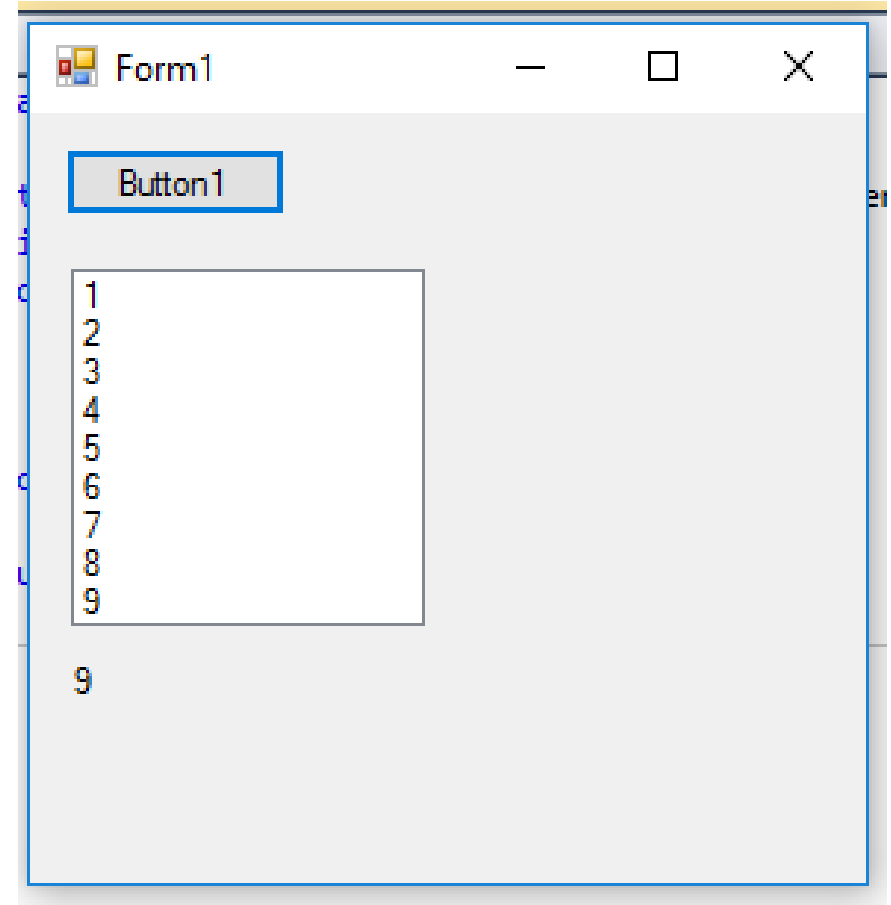
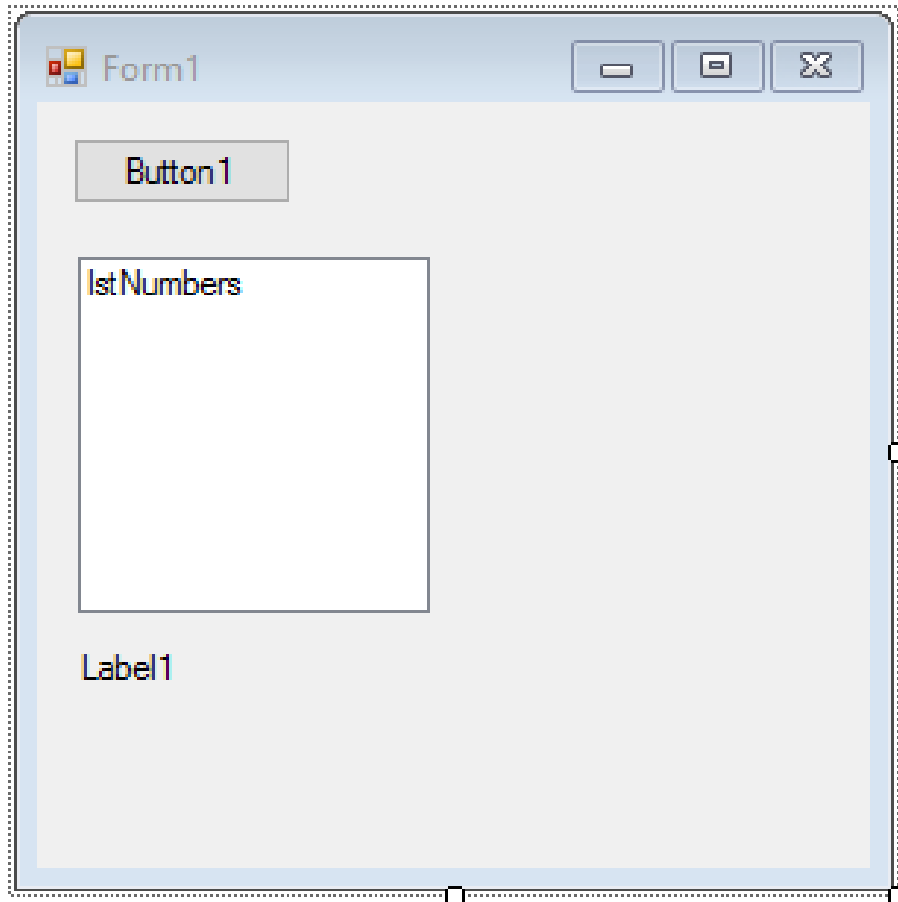
## REPETITION (LOOPS) – 1 (Exercise)

by  
LIM KAR SING

FACULTY OF CIVIL ENGINEERING & EARTH RESOURCES  
UNIVERSITI MALAYSIA PAHANG

[limks@ump.edu.my](mailto:limks@ump.edu.my)

# Exercise 15 – Do While... Loop (Form and Output)



# Exercise 15 – Do While... Loop (Code)

```
Private Sub Button1_Click(ByVal sender As  
System.Object, ByVal e As System.EventArgs)  
Handles BtnDisplay.Click
```

```
'Tabulate the numbers from 1 to 9
```

```
Dim num As Integer = 1  
Do While num <= 9
```

For counter As Integer = 1 To 9

```
    lblResult.Text = num
```

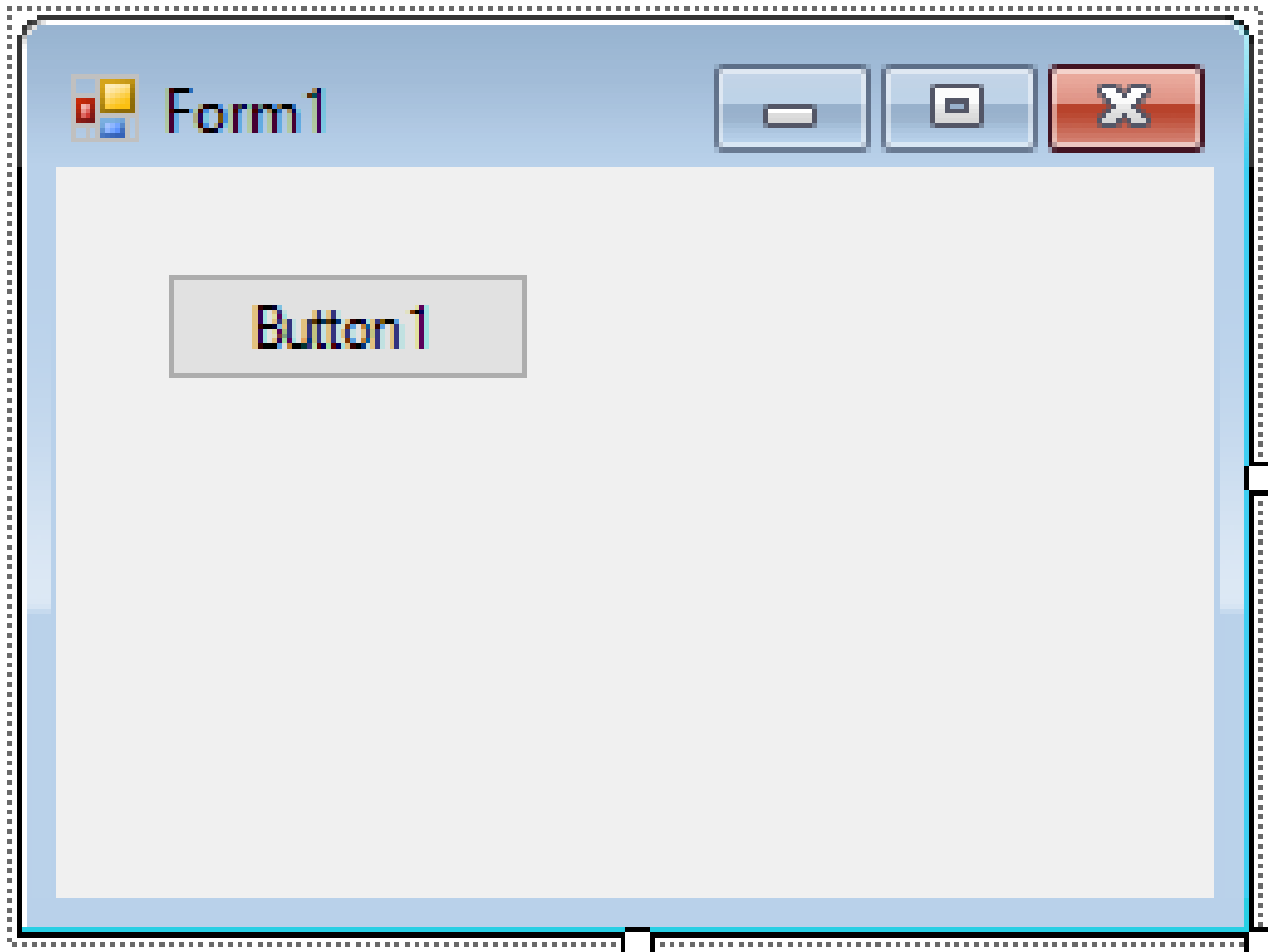
```
    lstNumbers.Items.Add(num)
```

```
    num += 1 'Add 1 to the value of num
```

```
Loop
```

```
End Sub
```

# Exercise 16 – Do... Loop Until (Form)



# Exercise 16 – Do... Loop Until (Code)

```
Private Sub Button1_Click(ByVal sender As
System.Object, ByVal e As System.EventArgs) Handles
Button1.Click
    Dim password As String = ""
    Do
        password = InputBox("What is the password?")
        MsgBox("Wrong password, please try again!")
    Loop Until password = "FKASA-UMP"
End Sub
```

# Exercise 16 – Do... Loop Until (Output)

Form1

Button1

Exercise16-Do Loop Until

What is the password?

OK

Cancel

abc

Exercise16-Do Loop Until

Wrong password, please try again!

OK

Exercise16-Do Loop Until

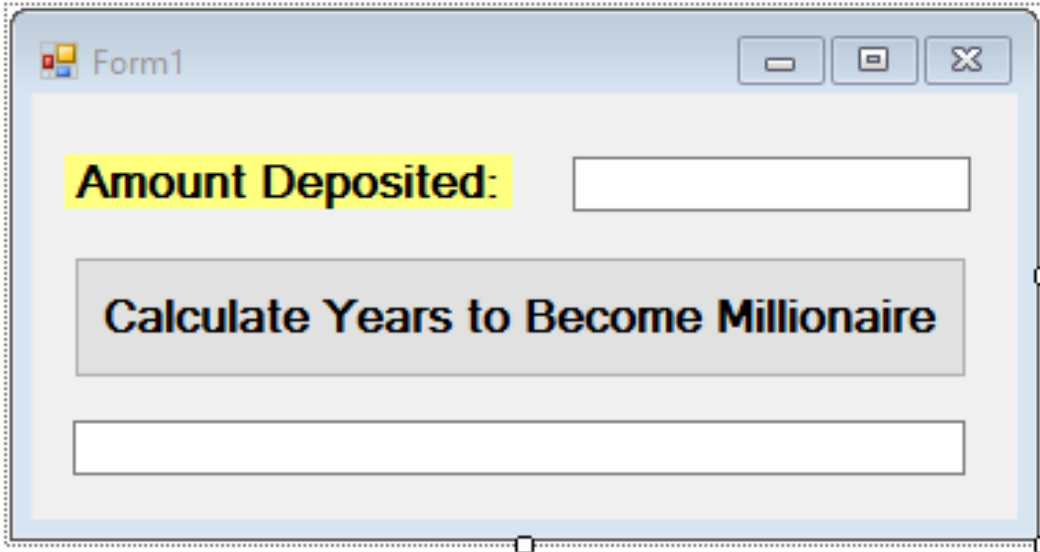
What is the password?

OK

Cancel

FKASA-UMP

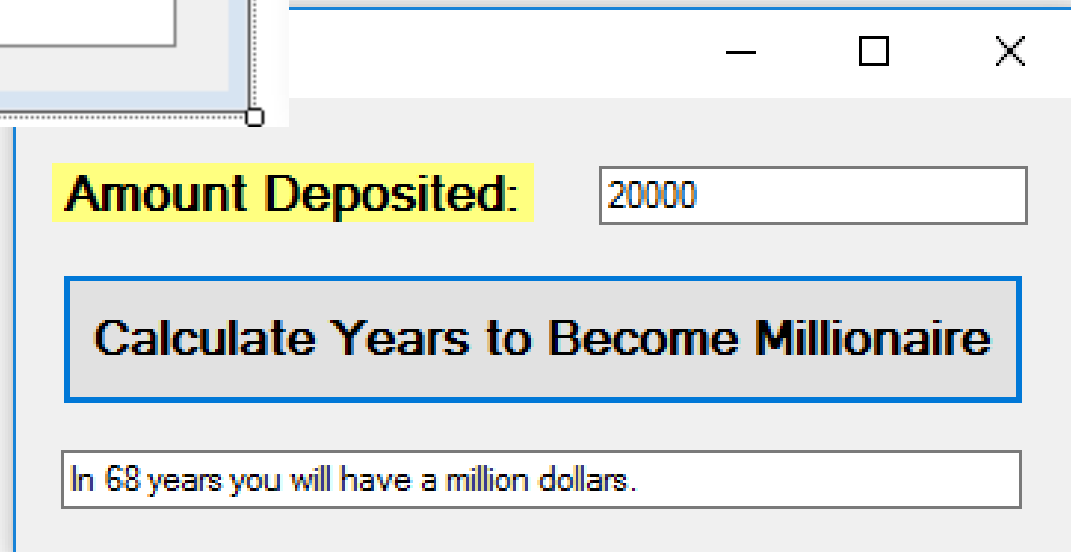
# Exercise 17 – Do Loop (Financial Calculation) Form and Output



Form1

**Amount Deposited:**

**Calculate Years to Become Millionaire**



**Amount Deposited:**

**Calculate Years to Become Millionaire**

# Exercise 17 – Do Loop (Financial Calculation) Code

```
Private Sub btnCal_Click(ByVal sender As  
System.Object, ByVal e As System.EventArgs) Handles  
btnCal.Click
```

```
    Dim money As Decimal, Years As Integer
```

```
    Do
```

```
        money = txtMoney.Text
```

```
        money += 0.03 * money
```

```
        Years += 1
```

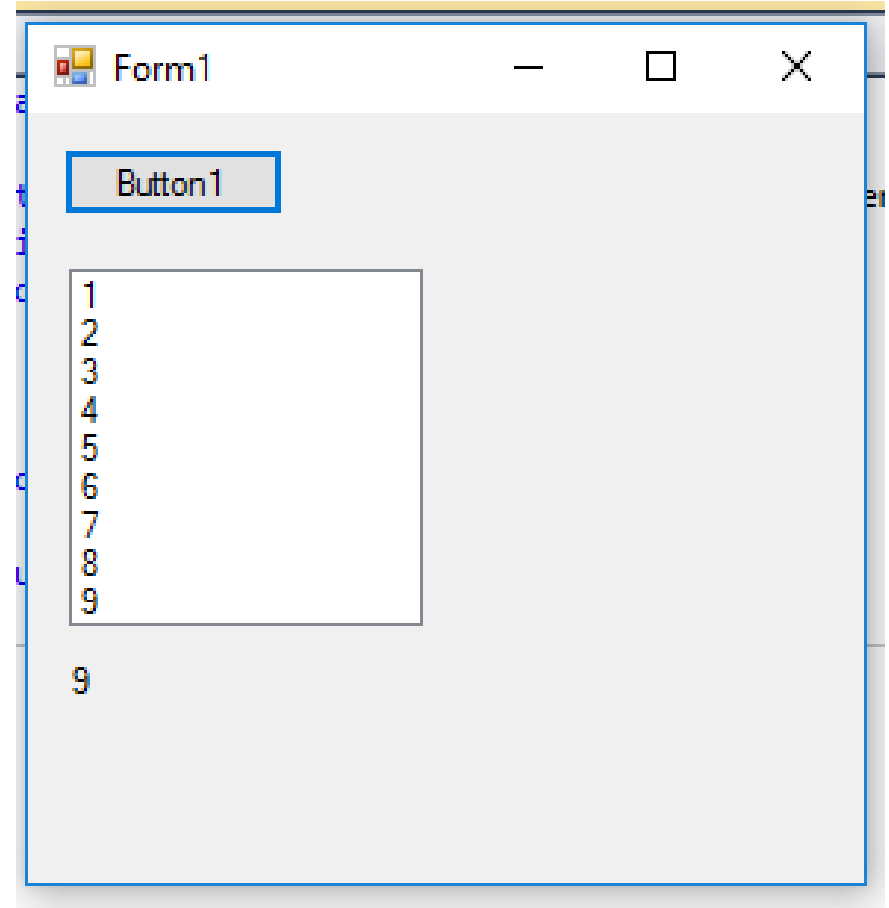
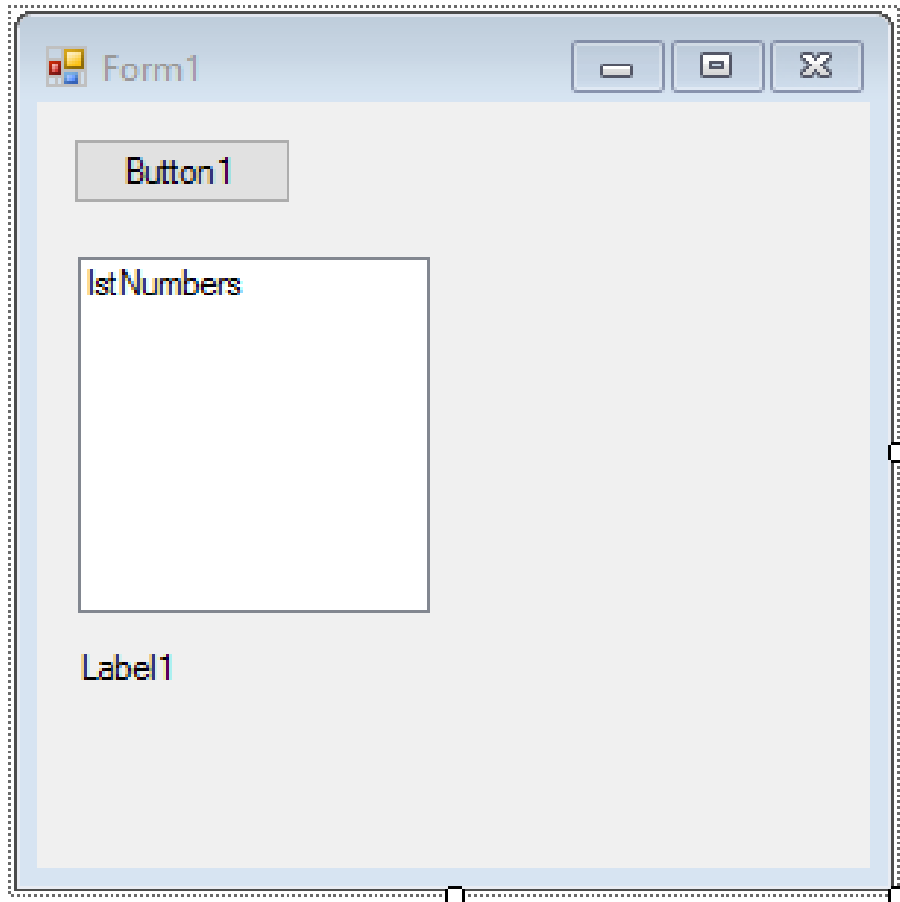
```
    Loop Until money >= 1000000
```

```
    txtDuration.Text = "In " & Years & " years you  
will have a million dollars."
```

```
End Sub
```



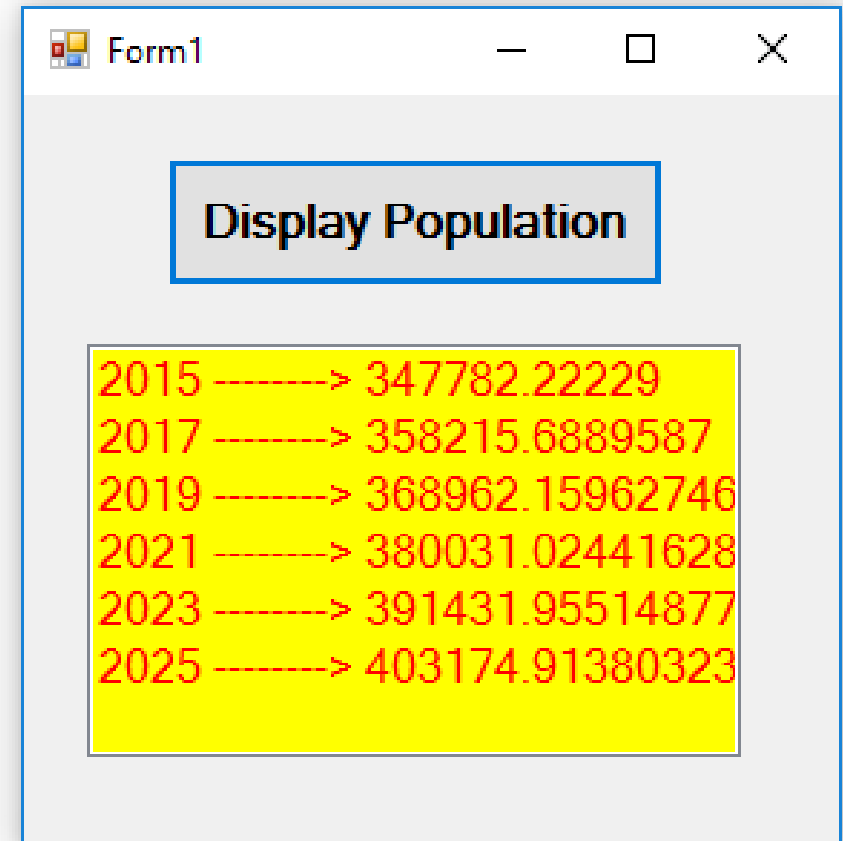
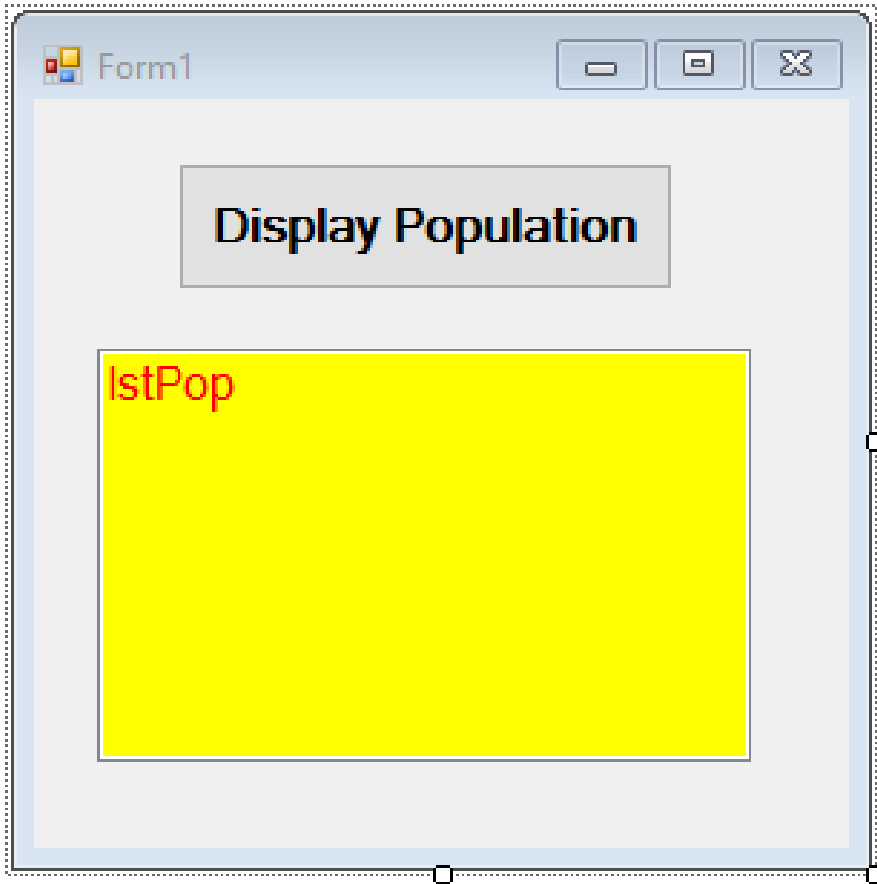
# Exercise 18 – For Next... Loop (Form and Output)



# Exercise 18 – For Next... Loop (Form and Output)

```
Private Sub Button1_Click(ByVal sender As  
System.Object, ByVal e As  
System.EventArgs) Handles BtnDisplay.Click  
    'Tabulate the numbers from 1 to 9  
    For counter As Integer = 1 To 9  
        Label1.Text = counter  
        ListBox1.Items.Add(counter)  
    'Add 1 to the value of num  
    Loop  
End Sub
```

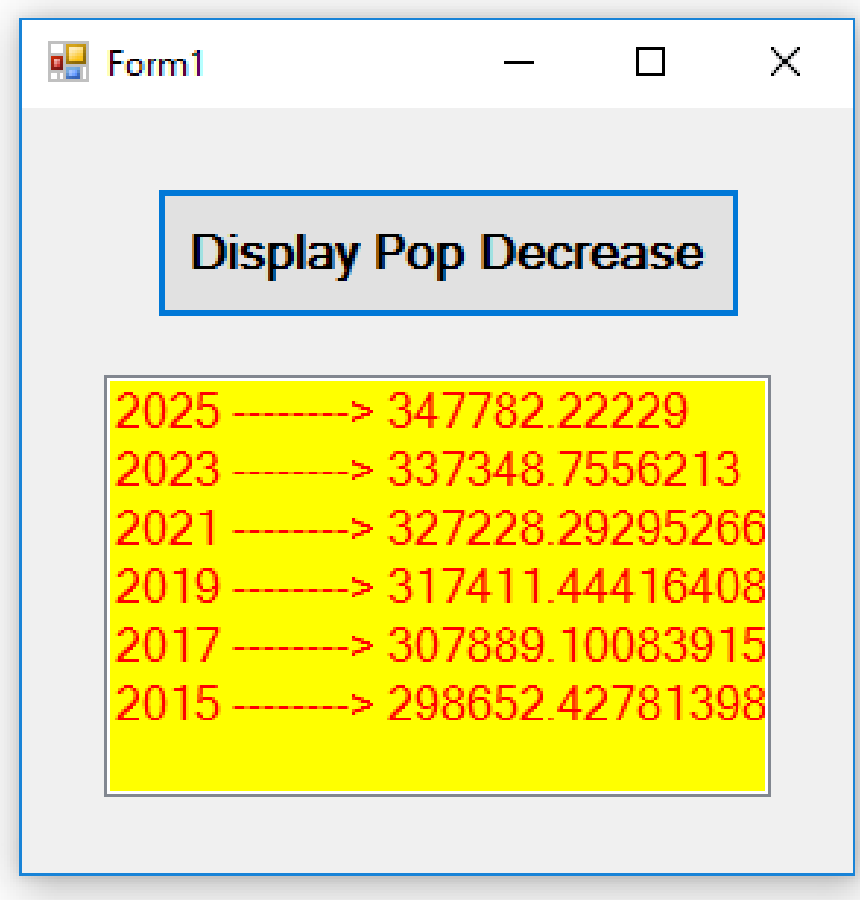
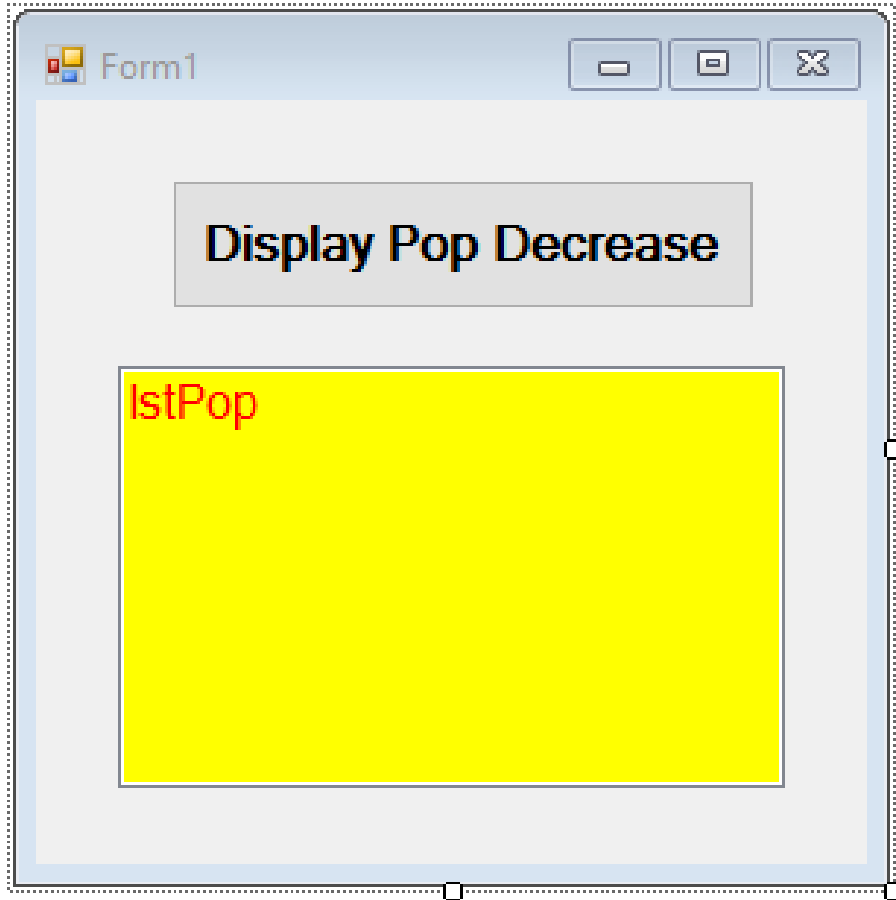
# Exercise 19 – For Next... Loop – With Step Increment (Form and Output)



# Exercise 19 – For Next... Loop – With Step Increment (Code)

```
Private Sub btnpop_Click(ByVal sender As  
System.Object, ByVal e As System.EventArgs)  
Handles btnPop.Click  
    Dim pop As Double = 347782.22229  
    For Year As Integer = 2015 To 2025 Step 2  
        lstPop.Items.Add(Year & " -----> " & pop)  
        pop += 0.03 * pop  
    Next  
End Sub
```

# Exercise 19 – For Next... Loop – With –ve Step Increment (Form and Output)



# Exercise 19 – For Next... Loop – With –ve Step Increment (Form and Output)

```
Private Sub btnPop_Click(ByVal sender As
System.Object, ByVal e As System.EventArgs)
Handles btnPop.Click
    Dim pop As Double = 347782.22229
    For Year As Integer = 2025 To 2015 Step -2
        lstPop.Items.Add(Year & " -----> " & pop)
        pop -= 0.03 * pop
    Next
End Sub
```