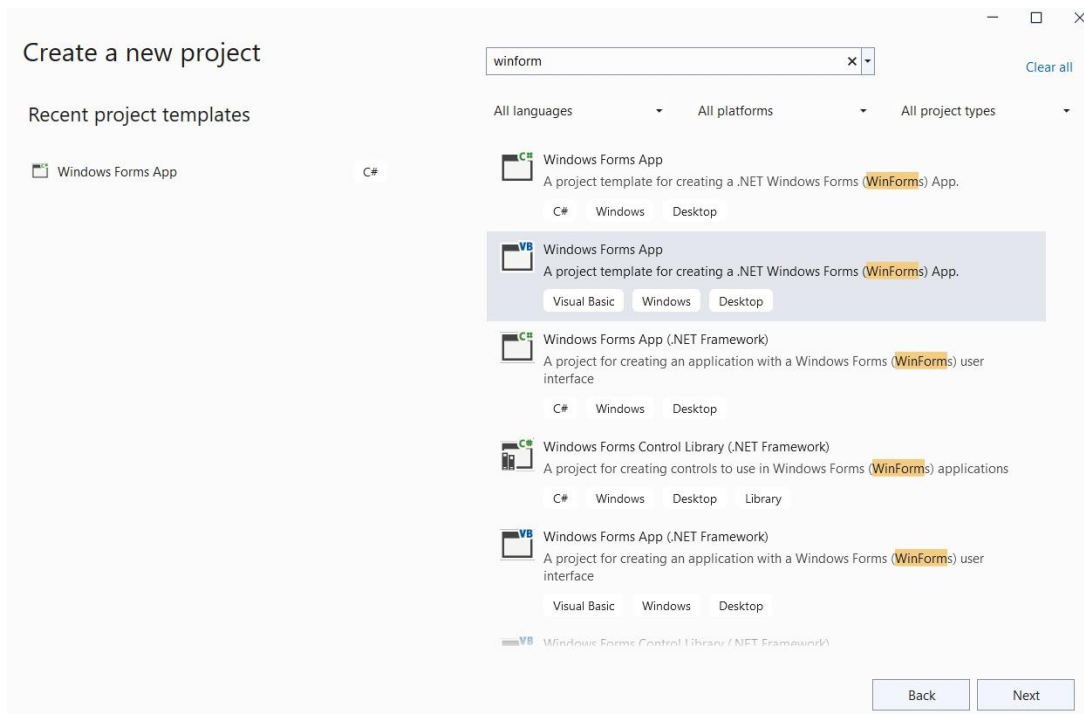


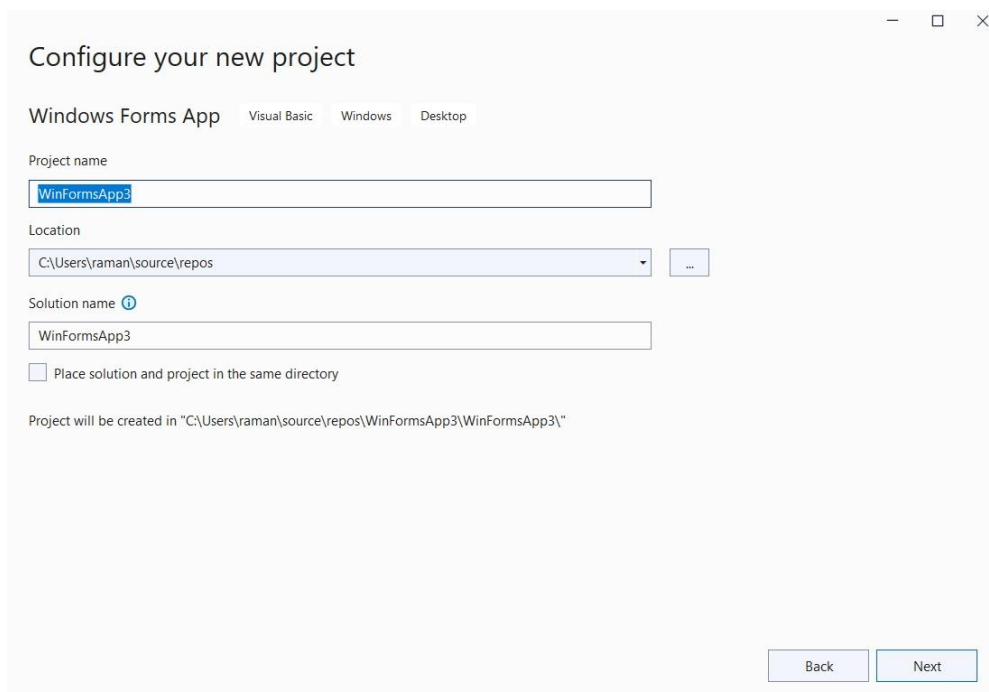
VB.NET Graphical User Interface using Visual Studio 2022 Community Edition Handbook

Raman Deep Singh

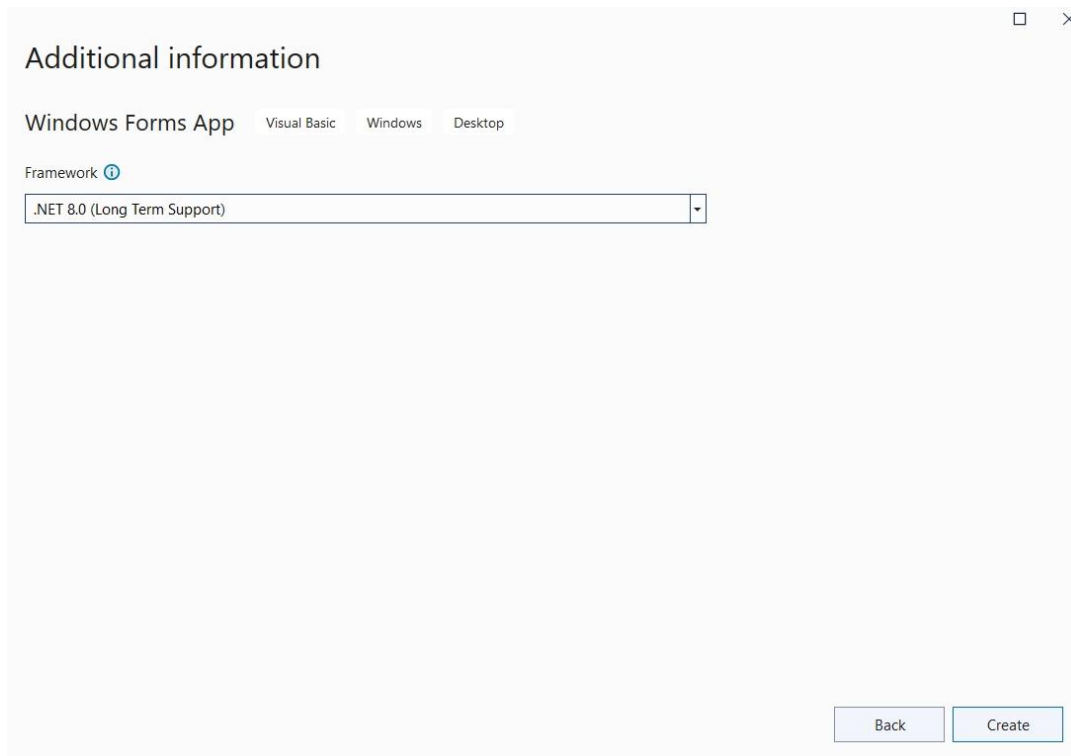
Create a new Project in Visual Studio 2022



Select Windows Form App C# and Click Next



Click Next



Additional information

Windows Forms App Visual Basic Windows Desktop

Framework ⓘ

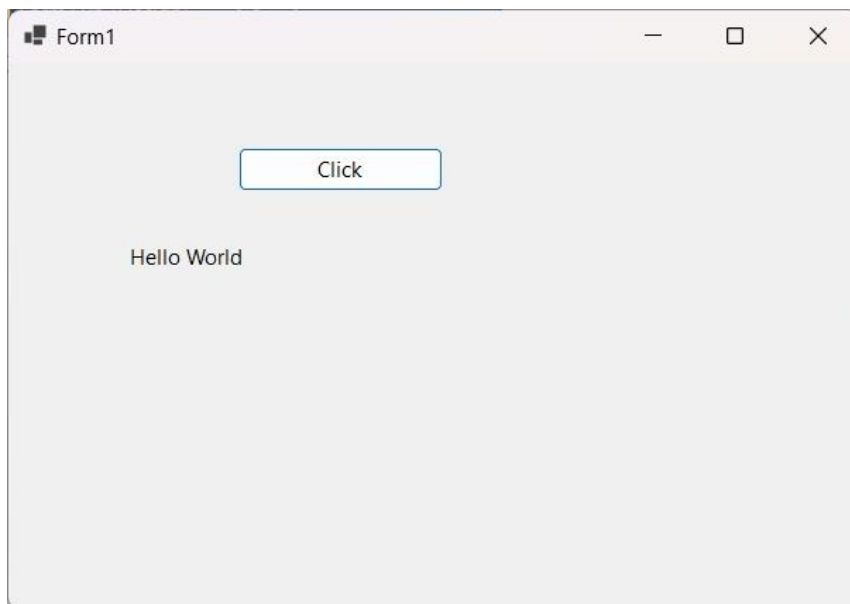
.NET 8.0 (Long Term Support)

Back Create

Click Create and New Project will be created

Place a new Button and Label on the form

Go to properties of Button and set Text property as "Click"



Form1

Click

Hello World

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles  
Button1.Click  
    Label1.Text = "Hello World"  
End Sub
```

Program to find sum, difference, product, quotient and remainder of two numbers

Form2

Enter First Number 7

Enter Second Number 8

Add Subtract Product

Quotient Remainder

Sum of two numbers is 15

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim a, b, sum As Integer
    a = Convert.ToInt32(TextBox1.Text)
    b = Convert.ToInt32(TextBox2.Text)
    sum = a + b
    Label3.Text = "Sum of two numbers is " & sum
End Sub
```

```
Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
    Dim a, b, diff As Integer
    a = Convert.ToInt32(TextBox1.Text)
    b = Convert.ToInt32(TextBox2.Text)
    diff = a - b
    Label3.Text = "Difference of two numbers is " & diff
End Sub
```

```
Private Sub Button3_Click(sender As Object, e As EventArgs) Handles Button3.Click
    Dim a, b, product As Integer
    a = Convert.ToInt32(TextBox1.Text)
    b = Convert.ToInt32(TextBox2.Text)
    product = a * b
    Label3.Text = "Product of two numbers is " & product
End Sub
```

```
Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click
    Dim a, b, quotient As Integer
    a = Convert.ToInt32(TextBox1.Text)
    b = Convert.ToInt32(TextBox2.Text)
    quotient = a / b
    Label3.Text = "Quotient of two numbers is " & quotient
End Sub
```

```
Private Sub Button5_Click(sender As Object, e As EventArgs) Handles Button5.Click
    Dim a, b, remainder As Integer
    a = Convert.ToInt32(TextBox1.Text)
    b = Convert.ToInt32(TextBox2.Text)
    remainder = a Mod b
    Label3.Text = "Remainder of two numbers is " & remainder
End Sub
```

Program to find area of square

The screenshot shows a Windows Form titled 'Form3'. It has a light gray background. At the top, there is a label 'Enter side of square' followed by a text box containing the number '5'. Below the text box is a button labeled 'Calculate Area'. At the bottom of the form, there is a label that reads 'Area of square is 25'.

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim side, area As Integer
    side = Convert.ToInt32(TextBox1.Text)
    area = side * side
    Label2.Text = "Area of square is " & area
End Sub
```

Program to find area of rectangle

The screenshot shows a Windows Form titled 'Form4'. It has a light gray background. There are two labels: 'Enter Length of Rectangle' followed by a text box containing '7', and 'Enter Breadth of Rectangle' followed by a text box containing '3'. Below these text boxes is a button labeled 'Calculate'. At the bottom of the form, there is a label that reads 'Area of Rectangle is 21'.

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim l, b, area As Integer
    l = Convert.ToInt32(TextBox1.Text)
    b = Convert.ToInt32(TextBox2.Text)
    area = l * b
    Label3.Text = "Area of Rectangle is " & area
End Sub
```

Program to find area of circle

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim radius, area As Double
    radius = Convert.ToDouble(TextBox1.Text)
    area = 3.14 * radius * radius
    Label2.Text = "Area of Circle is " & area
End Sub
```

Program to demonstrate If Else statement

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim a As Integer
    a = Convert.ToInt32(TextBox1.Text)
    If a = 10 Then
        Label2.Text = "Value of a is 10"
    Else
        Label2.Text = "Value of a is not equal to 10"
    End If
End Sub
```

Program to demonstrate If Else statement Relational Operator (>=)

Form7

Enter a Number

2

Check

Value of a is less than 10

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim a As Integer
    a = Convert.ToInt32(TextBox1.Text)
    If a >= 10 Then
        Label2.Text = "Value of a is greater than or equal to 10"
    Else
        Label2.Text = "Value of a is less than 10"
    End If
End Sub
```

Program to demonstrate If Else statement relational operator (≤ 10)

Form8

Enter a Number

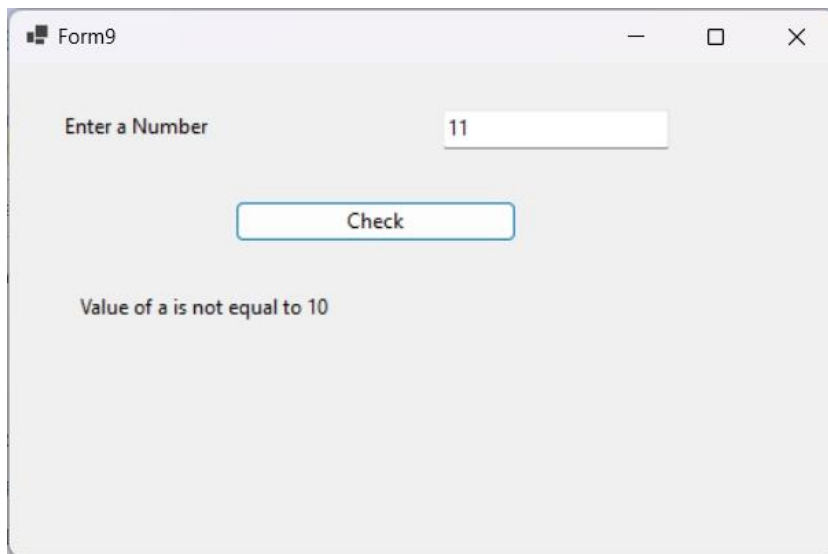
5

Check

Value of a is less than or equal to 10

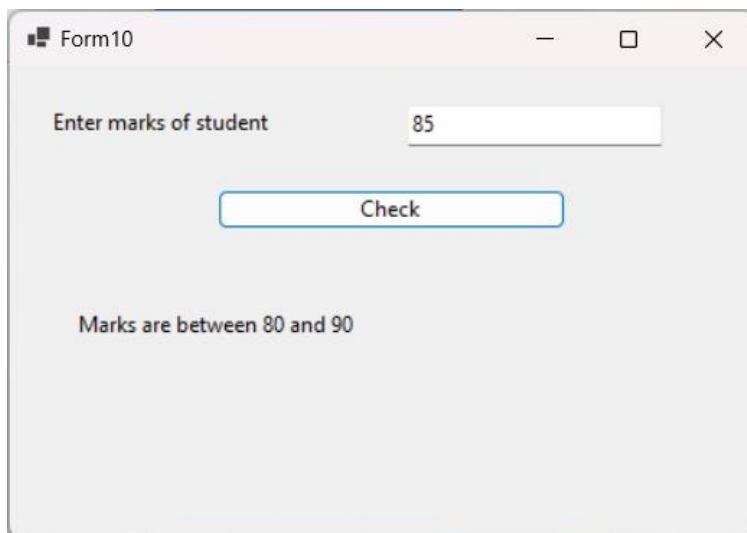
```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim a As Integer
    a = Convert.ToInt32(TextBox1.Text)
    If a <= 10 Then
        Label2.Text = "Value of a is less than or equal to 10"
    Else
        Label2.Text = "Value of a is greater than 10"
    End If
End Sub
```

Program to demonstrate Not Operator in If Else Statement



```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim a As Integer
    a = Convert.ToInt32(TextBox1.Text)
    If Not a = 10 Then
        Label2.Text = "Value of a is not equal to 10"
    Else
        Label2.Text = "Value of a is equal to 10"
    End If
End Sub
```

Program to demonstrate And Operator to check whether marks are between 80 and 90



```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim marks As Integer
    marks = Convert.ToInt32(TextBox1.Text)
    If marks >= 80 And marks <= 90 Then
        Label2.Text = "Marks are between 80 and 90"
    Else
        Label2.Text = "Marks are not between 80 and 90"
    End If
End Sub
```

Program to demonstrate Or Operator Check whether number is equal to 80 or 90

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim a As Integer
    a = Convert.ToInt32(TextBox1.Text)
    If a = 80 Or a = 90 Then
        Label2.Text = "Marks are either equal to 80 or 90"
    Else
        Label2.Text = "Marks are neither equal to 80 or 90"
    End If
End Sub
```

Program to demonstrate Select Case statement to enter day in number and print day in words

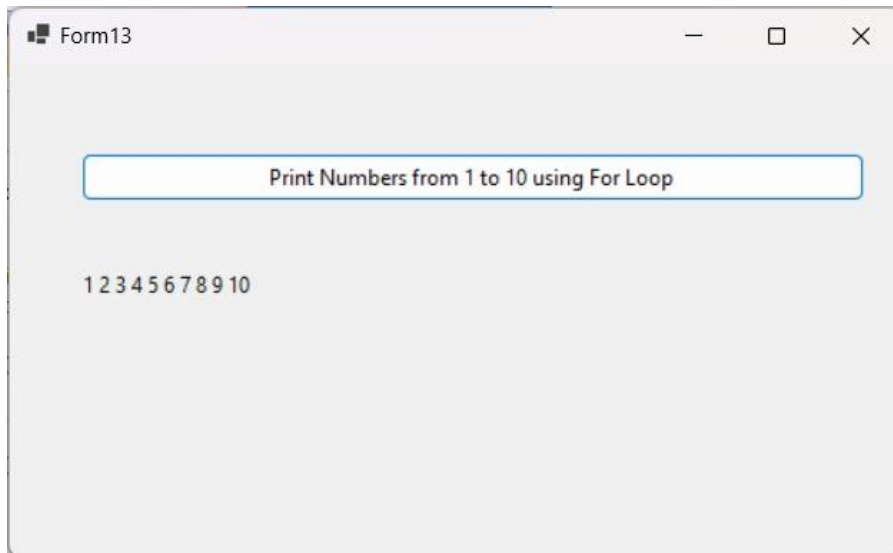
```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim day As Integer
    day = Convert.ToInt32(TextBox1.Text)
    Select Case day
        Case 1
            Label1.Text = "Monday"
        Case 2
            Label2.Text = "Tuesday"
        Case 3
            Label2.Text = "Wednesday"
        Case 4
            Label1.Text = "Thursday"
        Case 5
```

```

        Label2.Text = "Friday"
    Case 6
        Label2.Text = "Saturday"
    Case 7
        Label2.Text = "Sunday"
    Case Else
        Label2.Text = "Enter a day between 1 to 7"
    End Select
End Sub

```

Program to demonstrate For Loop to print numbers from 1 to 10 in Label

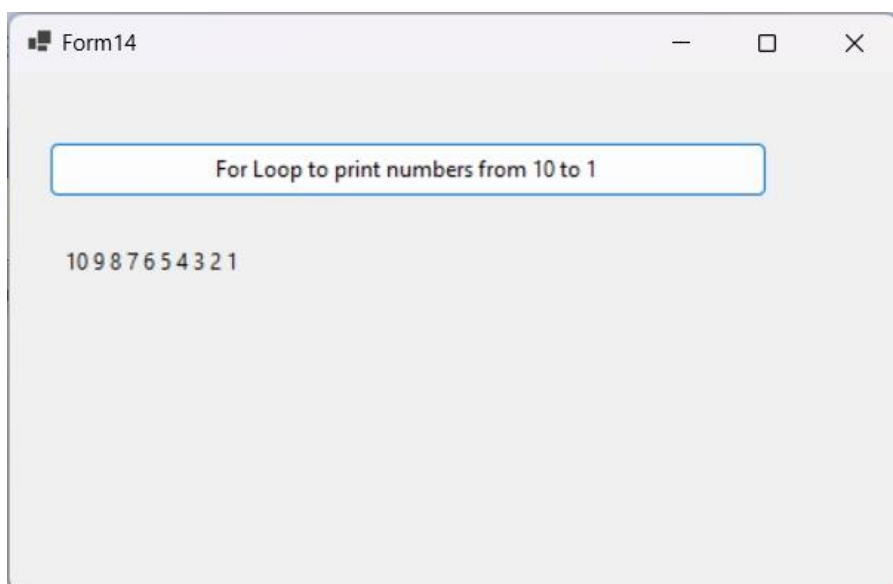


```

Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim i As Integer
    For i = 1 To 10
        Label1.Text = Label1.Text + " " & i
    Next
End Sub

```

Program to demonstrate For Loop to print numbers from 10 to 1



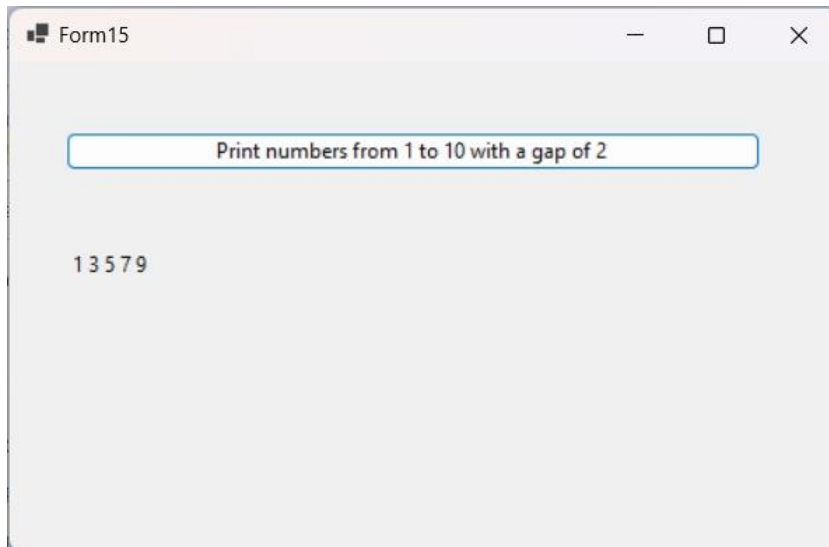
```

Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim i As Integer

```

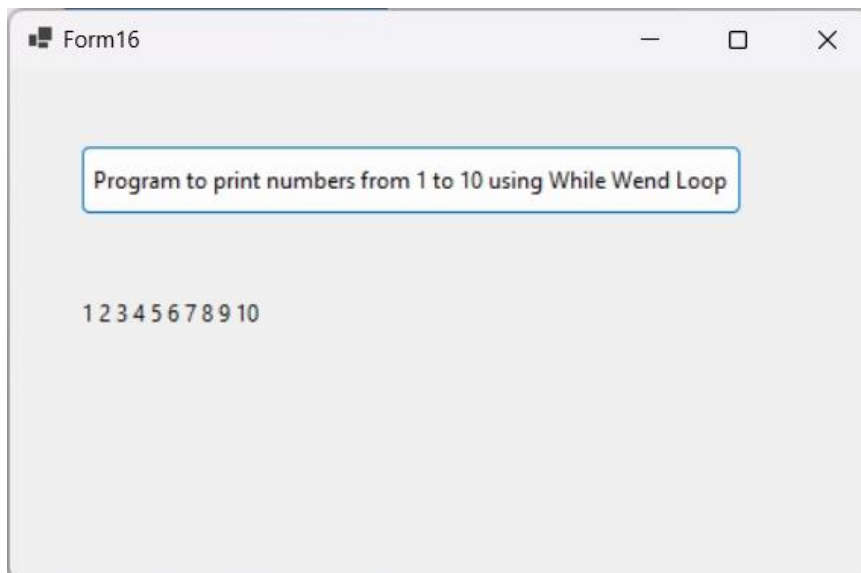
```
For i = 10 To 1 Step -1
    Label1.Text = Label1.Text & " " & i
Next
End Sub
```

Program to demonstrate for loop to print numbers from 1 to 10 with a gap of 2 using for loop



```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim i as Integer
    For i = 1 To 10 Step 2
        Label1.Text = Label1.Text & " " & i
    Next
End Sub
```

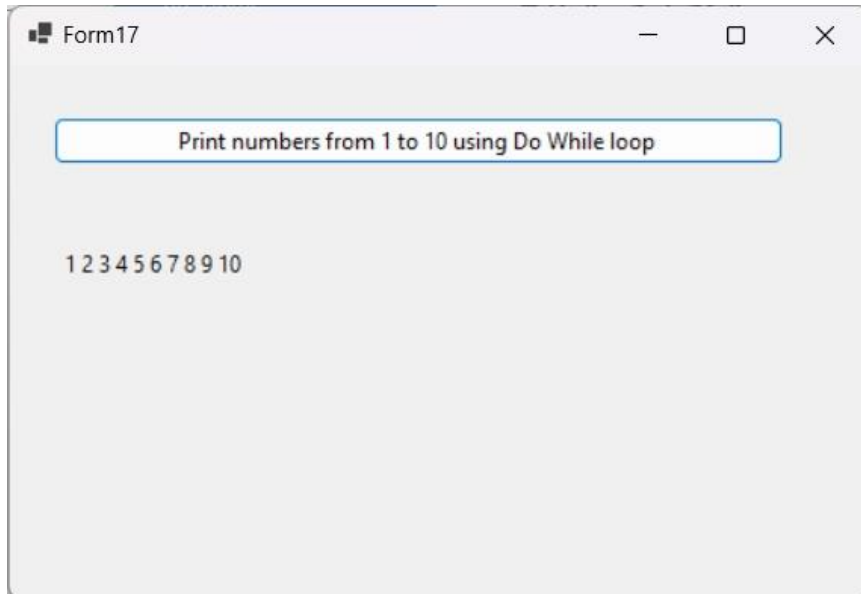
Program to print numbers from 1 to 10 using While Wend Loop



```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim i As Integer
    i = 1
    While i <= 10
        Label1.Text = Label1.Text & " " & i
        i = i + 1
    End While
End Sub
```

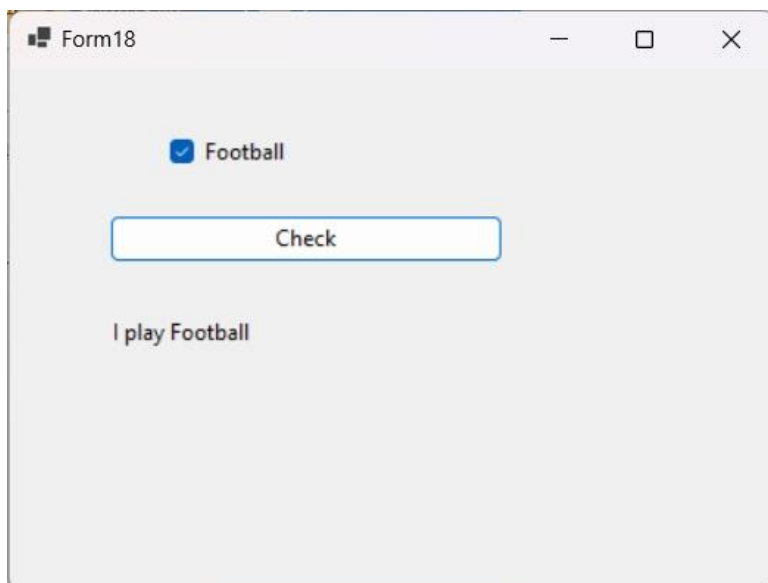
```
End While  
End Sub
```

Program to demonstrate Do While Loop to print numbers from 1 to 10



```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click  
    Dim i As Integer  
    i = 1  
    Do While i <= 10  
        Label1.Text = Label1.Text & " " & i  
        i = i + 1  
    Loop  
End Sub
```

Program to demonstrate CheckBox Control

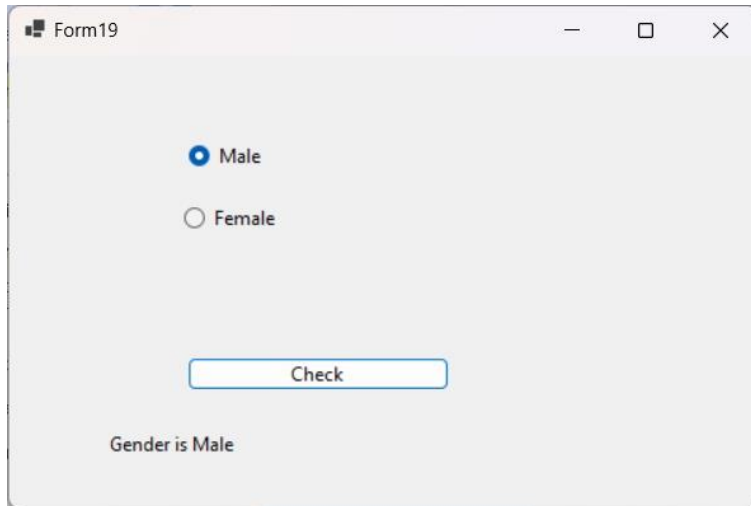


```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click  
    If CheckBox1.Checked = True Then  
        Label1.Text = "I play Football"  
    Else  
        Label1.Text = "I do Not Play Football"  
    End If  
End Sub
```

End Sub

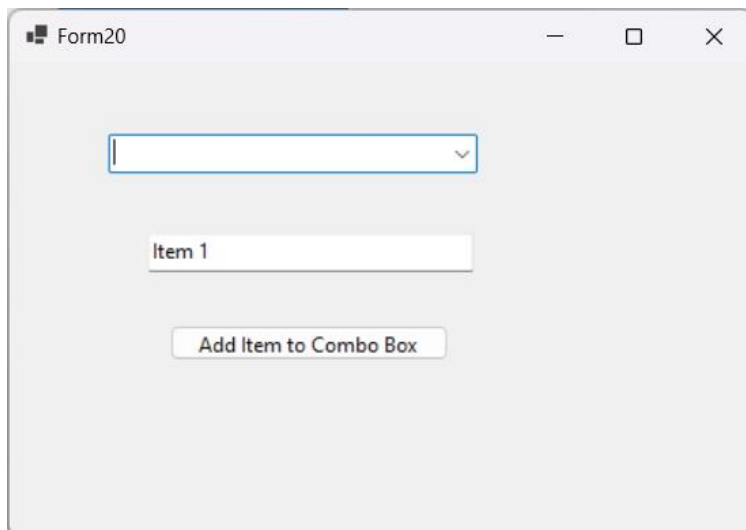
Program to demonstrate Radio Button Control

When you want to select only one radio button out of multiple radio buttons you should place them in a container control like a group box or a panel



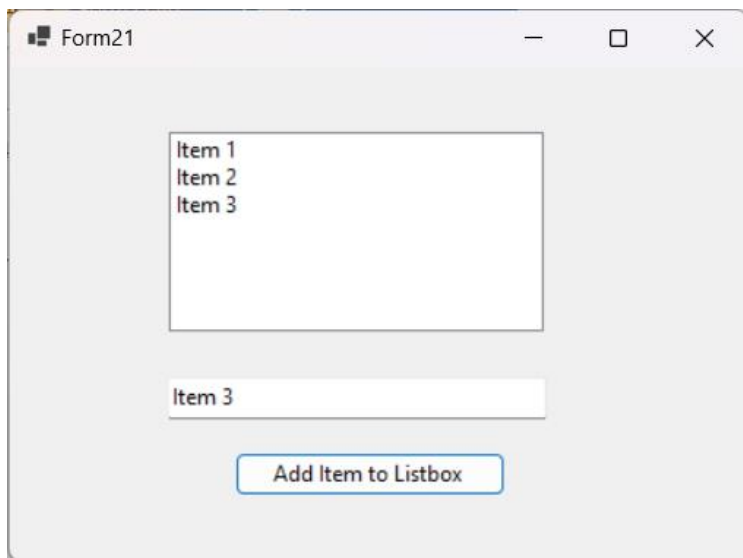
```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    If RadioButton1.Checked = True Then
        Label1.Text = "Gender is Male"
    End If
    If RadioButton2.Checked = True Then
        Label1.Text = "Gender is Female"
    End If
End Sub
```

Program to demonstrate ComboBox Control



```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    ComboBox1.Items.Add(TextBox1.Text)
End Sub
```

Program to demonstrate ListBox Control



```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    ListBox1.Items.Add(TextBox1.Text)
End Sub
```
