Practical No 16

VIII. Resources required (Additional)

→ If any web resources required.

X. Resources used (Additional)

→ https://docs.microsoft.com/en-us/dotnet/visual-basic/language-reference/statements/function-statement

→ https://www.tutorialspoint.com/vb.net/vb.net_functions.htm

XI. Program Code

1. **Write a program using Simple Function and Parameterized Function.**

➤ Module Module1

```
Sub Main()
    show()
    Dim a, b As Integer
    Console.WriteLine("Enter Two Numbers")
    a = Console.ReadLine()
    b = Console.ReadLine()
    Add(a, b)
    Console.WriteLine("Addition is = " & Add(a, b))
    Console.ReadLine()
End Sub
Public Function show()
    Console.WriteLine("This is Simple Function")
End Function
Public Function Add(ByVal i As Integer, ByVal j As Integer)
    Dim sum As Integer
    sum = i + j
    Return sum
End Function
End Module
```

XII. Results (output of the program)

This is Simple Function

Enter Two Numbers

45

65

Addition is = 110

XIII. Practical related Questions

1. **Function returns a value (TRUE / FALSE).**
   ➢ Function returns a value - True
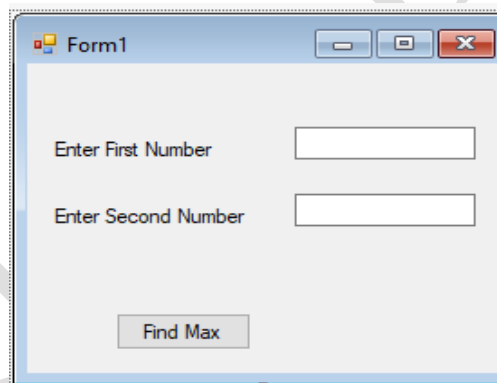
2. **Error – 'Tyep Expected'**
   ➢ **Corrected Code**

```
Function FindMax(ByVal num1 As Integer, ByVal num2 As Integer) As Integer
    Dim result As Integer
    If (num1 > num2) Then
       result = num1
    Else
       result = num2
    End If
    FindMax = result
End Function
```

XIV. Exercise

1. **Write a program to identify maximum number using parameterized function.**
   (Use two Textbox for input a integer number and display output in Message Box)
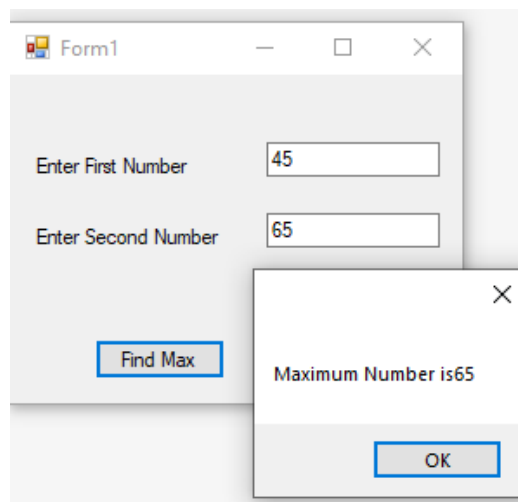   ➢


```
Public Class Form1
    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles
Button1.Click
        Dim a, b As Integer
        Dim res As Integer
        a = Val(TextBox1.Text)
        b = Val(TextBox2.Text)
        Call findmax(a, b)
        res = findmax(a, b)
        MessageBox.Show("Maximum Number is" & res)
        Console.ReadLine()
    End Sub
    Private Function findmax(ByVal num1 As Integer, ByVal num2 As Integer)
        Dim result As Integer

        If (num1 > num2) Then
            result = num1
        Else
            result = num2
        End If
        findmax = result
    End Function
End Class
```

OUTPUT:

2. **Write a program using recursion(Factorial).**

➤
```vbnet
Module Module1
    Sub Main()
        Dim n As Integer
        Console.WriteLine("Enter Number=")
        n = Console.ReadLine()
        Console.WriteLine("Result=")
        Console.WriteLine(Fact(n))
        Console.ReadLine()
    End Sub
    Function Fact(ByVal n As Integer)
        If n = 0 Then
            Fact = 1
        Else
            Fact = n * Fact(n - 1)
        End If
    End Function
End Module
```

OUTPUT:

Enter Number=

5

Result=

120