Practical No 20 & 21

VIII. Resources required (Additional)

→ If any web resources required.

X. Resources used (Additional)

https://www.tutorialspoint.com/vb.net/vb.net

XI. Program Code

1. **Write a program to implement the concept of method overloading & overriding.**

- **Overloading:**

```
Module Module1

    Sub Main()
        Dim res As New addition
        Console.WriteLine("Overloaded Values of Class addition")
        Console.WriteLine(res.add(10))
        Console.WriteLine(res.add(35, 20))
        Console.ReadLine()
    End Sub

End Module

Public Class addition
    Public i, j As Integer
    Public Function add(ByVal i As Integer) As Integer
        Return i
    End Function

    Public Function add(ByVal i As Integer, ByVal j As Integer) As Integer
        Return i + j
    End Function
End Class
```

Output:

```
Overloaded Values of Class addition
10
55
```

Overriding:

```
Module Module1

    Sub Main()
        Dim obj As New child
        Dim result As Integer
        result = obj.add(10, 5)
        Console.WriteLine("Overloaded Values of Class addition")
        Console.WriteLine("Result =" & result)
        Console.ReadLine()
    End Sub
End Module
Public Class parent
    Public Overridable Function add(ByVal i As Integer, ByVal j As Integer)
        Return (i + j)
    End Function
End Class

Public Class child
    Inherits parent
    Public Overrides Function add(ByVal i As Integer, ByVal j As Integer)
        Console.WriteLine("Result of Addition =" & MyBase.add(12, 18))
        Return (i + j)
    End Function
End Class
```

Output:

```
Result of Addition =30
Overloaded Values of Class addition
Result =15
```

XII. Results (output of the program)

In the above overloading example the same function add is called to perform different operations based on different arguments.

In the above overriding the parent class function add is overridden in the child class using the MyBase.add(12, 18) statement. So first the overridden value is displayed, then the value from child class is display**.**

XIII. Practical related Questions

1. **Find output of following Code.**

➢ Area of the Circle : 31.181246

Area of the Rectangle : 20

2. **Implement windows application for employee details using overriding method.**

➢

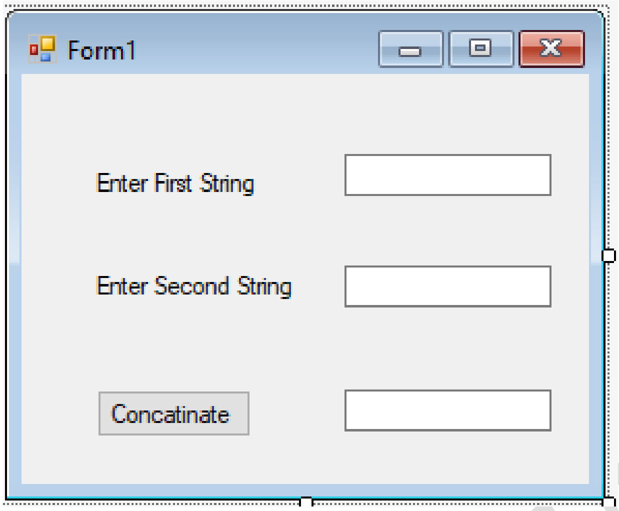
```
Module Module1

    Sub Main()
        Dim obj As New EmpInfo
        obj.ShowInfo()
        Console.ReadLine()
    End Sub

End Module
Public Class EmpPersonalDetails
    Dim name As String
    Dim address As String
    Public Overridable Function ShowInfo()
        Console.WriteLine("Employee Name" & name)
        Console.WriteLine("Employee Address" & address)
    End Function
End Class
Public Class EmpInfo
    Inherits EmpPersonalDetails
    Dim EmpId As Integer
    Dim sallary As Integer
    Dim JoinDate As Date
    Overloads Function ShowInfo()
        MyBase.ShowInfo()
        Console.WriteLine("Employee ID" & EmpId)
        Console.WriteLine("Employee Sallary" & sallary)
        Console.WriteLine("Employee Joining Date" & JoinDate)
    End Function
End Class
OUTPUT:
```

```
Employee Name
Employee Address
Employee ID0
Employee Sallary0
Employee Joining Date12:00:00 AM
```

XIV. Exercise

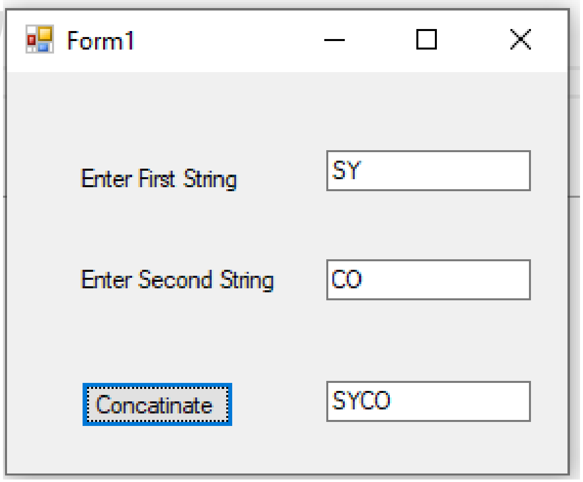
1. **Implement a windows application for show string concatenation using overload method**

➢



```
Public Class Form1

    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
        Dim str1, str2, str3 As String
        str1 = TextBox1.Text
        str2 = TextBox2.Text

        str3 = str1 + str2
        TextBox3.Text = str3
    End Sub

End Class
```

Output:



Enter First String SY

Enter Second String CO

SYCO