



JAMAL MOHAMED COLLEGE

(AUTONOMOUS) TIRUCHIRAPPALLI.

DEPARTMENT OF COMPUTER SCIENCE &IT

VB.NET LAB MANUAL

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Ex.No:1-a).**VOWEL CHECKING**

Aim: Write aVB.Net program to accept any character from keyboard and display whether it is vowel or not.

Procedure:

1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File →New → Project → WindowsApplication.
3. Place the label, textbox and button in the window.
4. Write the code in click event of Button1
5. Run the application by pressing F5 key or by clicking debug button.

Control Name	Property	Setting
Label1	Text	Enter the character
Label2	Text	Result
Text1	--	--
Text2	--	--
Button1	Text	Check
Button2	Text	Clear

Program:

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
```

```
    Dim c As Char
```

```
    c = UCase(TextBox1.Text)
```

```
    If c = "A" Or c = "E" Or c = "I" Or c = "O" Or c = "U" Then
```

```
        TextBox2.Text = "VOWEL"
```

```
    Else
```

```
        TextBox2.Text = "NOT VOWEL"
```

```
    End If
```

```
End Sub
```

```
Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click
```

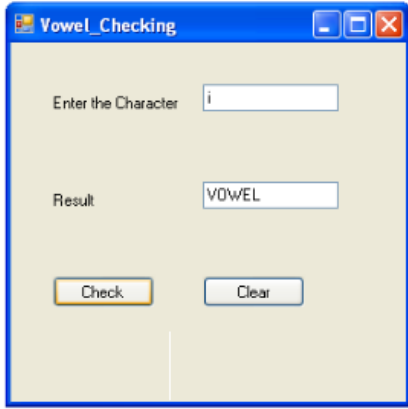
```
    TextBox1.Text = ""
```

```
    TextBox2.Text = ""
```

```
End Sub
```

```
End Class
```

Sample Output:



Result: Thus the program for vowel checking was executed and the output was verified.

Aim: Write a VB .NET program to find the area of circle using console application.

Procedure:

1. Click Start → Programs → Microsoft Visual Studio 2005 → Microsoft Visual Studio 2005
2. Select File → New → Project → Console application.
3. Open the Console application.
4. Write the code in the editor window.
5. Run the application by F5 key or pressing debug button.

Program:

```
Module Module1
```

```
Sub Main()
```

```
Dim a, r As Double
```

```
Console.WriteLine("Enter the radius:")
```


```
r = Console.ReadLine()
```

```
a = 3.14 * r * r
```

```
Console.WriteLine("Area of Circle:{0}", a)
```

```
End Sub
```

```
End Module
```



```
Enter the radius:5  
Area of Circle:78.5  
Press any key to continue . . . _
```

Result: Thus the program for case conversion was executed and the output was verified.

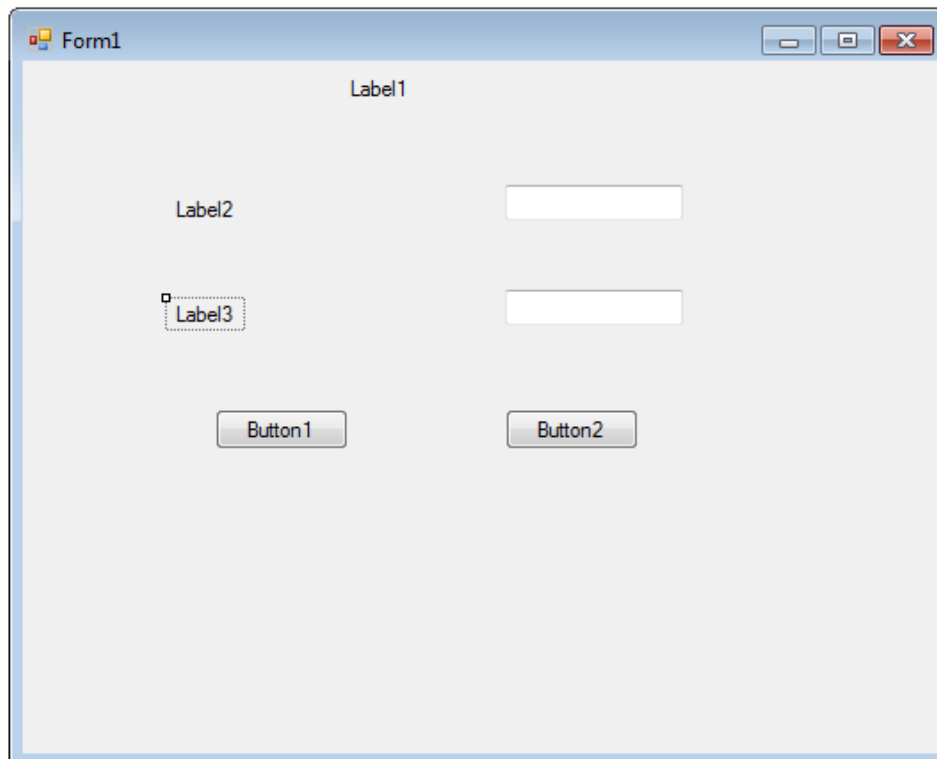
Aim: Write a VB .NET program to reverse the given set of numbers using windows application.

Procedure:

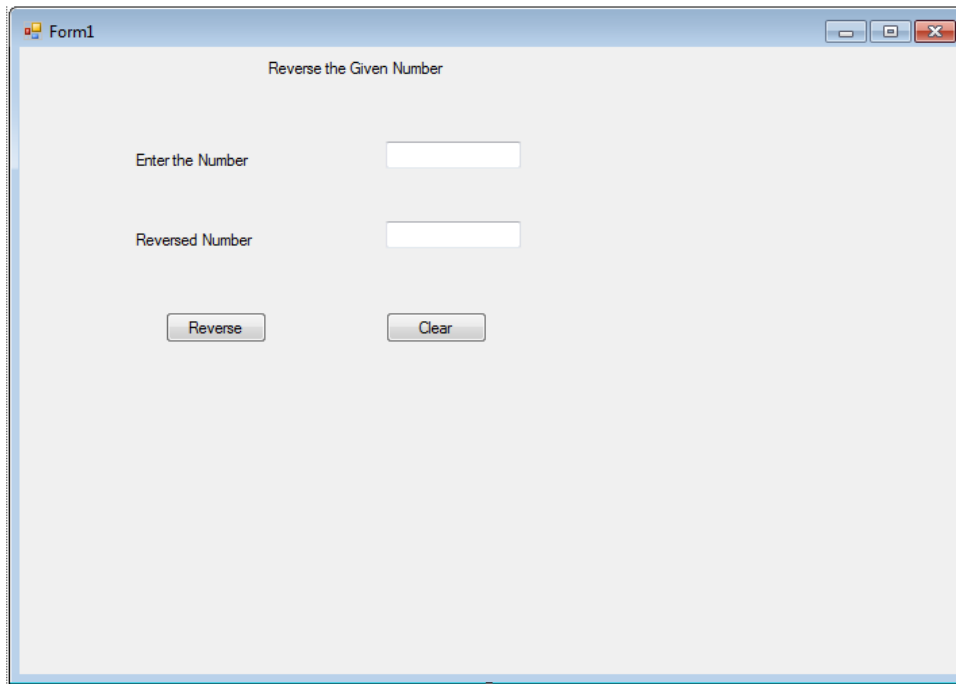
1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windows Application.
3. Place the label, textbox and button in the window.
4. Write the code in click event of Button1 and Button2
5. Run the application by pressing F5 key or by clicking debug button.

Control Name	Property	Setting
Label1	Text	Reverse a Given Number
Label2	Text	Enter the Number
Label3	Text	Reversed Number
Text1	--	--
Text2	--	--
Button1	Text	Reverse
Button2	Text	Clear

Form Design:



Form Layout:



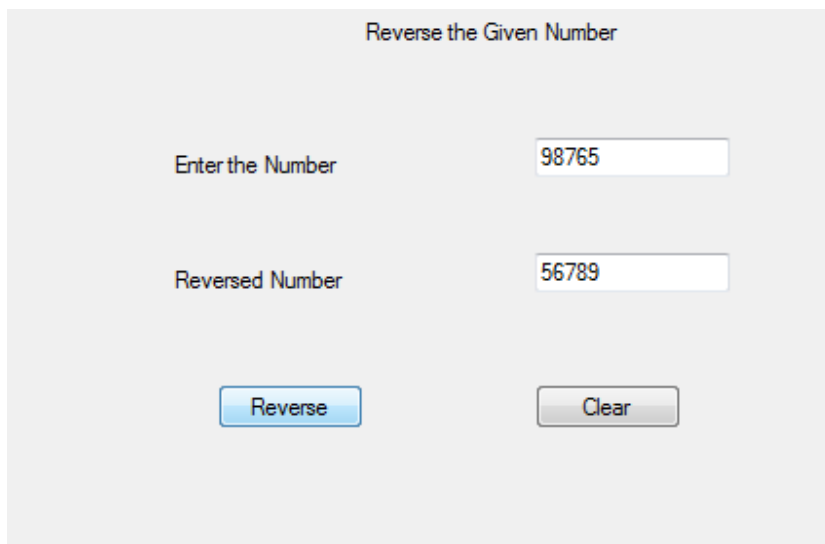
The screenshot shows a Windows application window titled "Form1". The window has a title bar with standard minimize, maximize, and close buttons. The main content area has a title "Reverse the Given Number". Below the title, there are two text boxes. The first is labeled "Enter the Number" and the second is labeled "Reversed Number". Below the text boxes, there are two buttons: "Reverse" and "Clear".

Program:

```
Public Class Form1
    Dim r As Integer
    Public Function Reverse(ByVal rn As Integer)
        Dim numbers = Val(TextBox1.Text)
        Dim result As Integer
        While numbers > 0
            rn = numbers Mod 10
            result = result * 10 + rn
            numbers = numbers \ 10
        End While
        Reverse = result
    End Function
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button1.Click
        TextBox2.Text = Reverse(r)
    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button2.Click
        TextBox1.Text = ""
        TextBox2.Text = ""
    End Sub
End Class
```

Sample Output:



Reverse the Given Number

Enter the Number

Reversed Number

Result: Thus the program was executed and the output was verified.

Ex.No:4 FACTORIAL OF THE GIVEN NUMBER

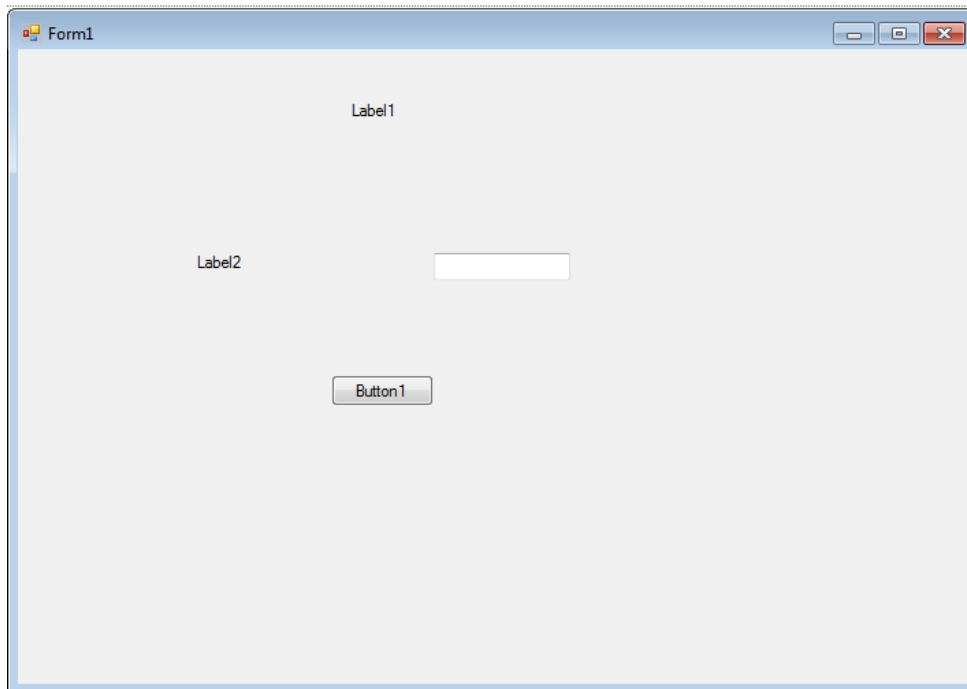
Aim: Write a VB .NET program to find the factorial of the given number.

Procedure:

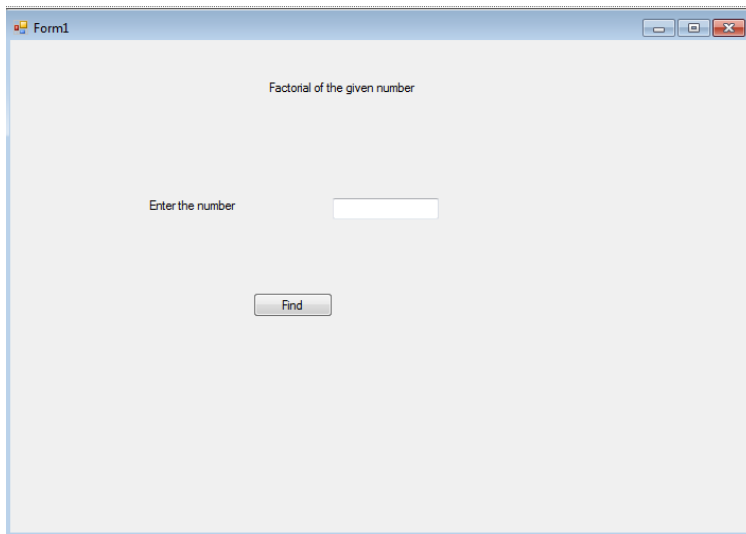
1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Place the label, textbox and button in the window.
4. Write the code in click event of Button1.
5. Run the application by pressing F5 key or by clicking debug button.

Control Name	Property	Setting
Label1	Text	Factorial of the given number
Label2	Text	Enter the Number
Text1	--	--
Button1	Text	Find

Form Design:



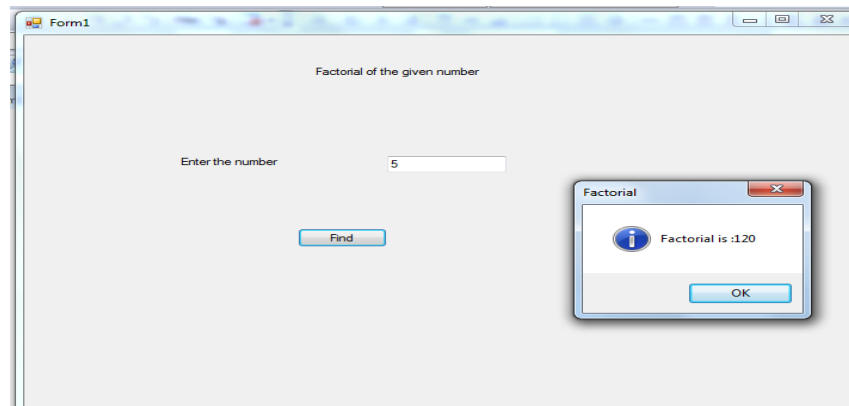
Form Layout:



Program:

```
Public Class Form1
    Function fact(ByVal a As Integer) As Integer
        Dim f As Integer
        f = 1
        For i = 1 To a
            f = f * i
        Next
        fact = f
    End Function
    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
        Dim n, r As Integer
        n = TextBox1.Text
        r = fact(n)
        MsgBox("Factorial is :" & r, vbInformation, "Factorial")
    End Sub
End Class
```

Sample Output:



Result: Thus the program was executed and the output was verified.

Ex.No:6 ILLUSTRATE THE USE MSGBOX AND INPUTBOX FUNCTION

Aim: Write a VB .NET program using MsgBox and InputBox function.

Procedure:

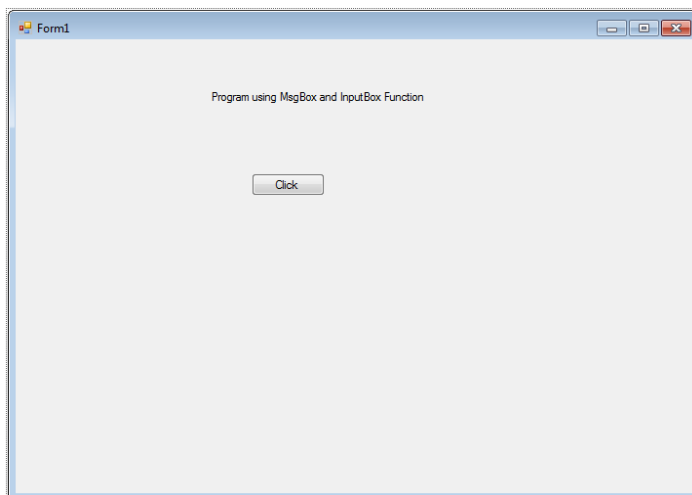
1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Place the label and button in the window.
4. Write the code in click event of Button1.
5. Run the application by pressing F5 key or by clicking debug button.

Control Name	Property	Setting
Label1	Text	Program using MsgBox and InputBox Function
Button1	Text	Click

Form Design:



Form Layout:

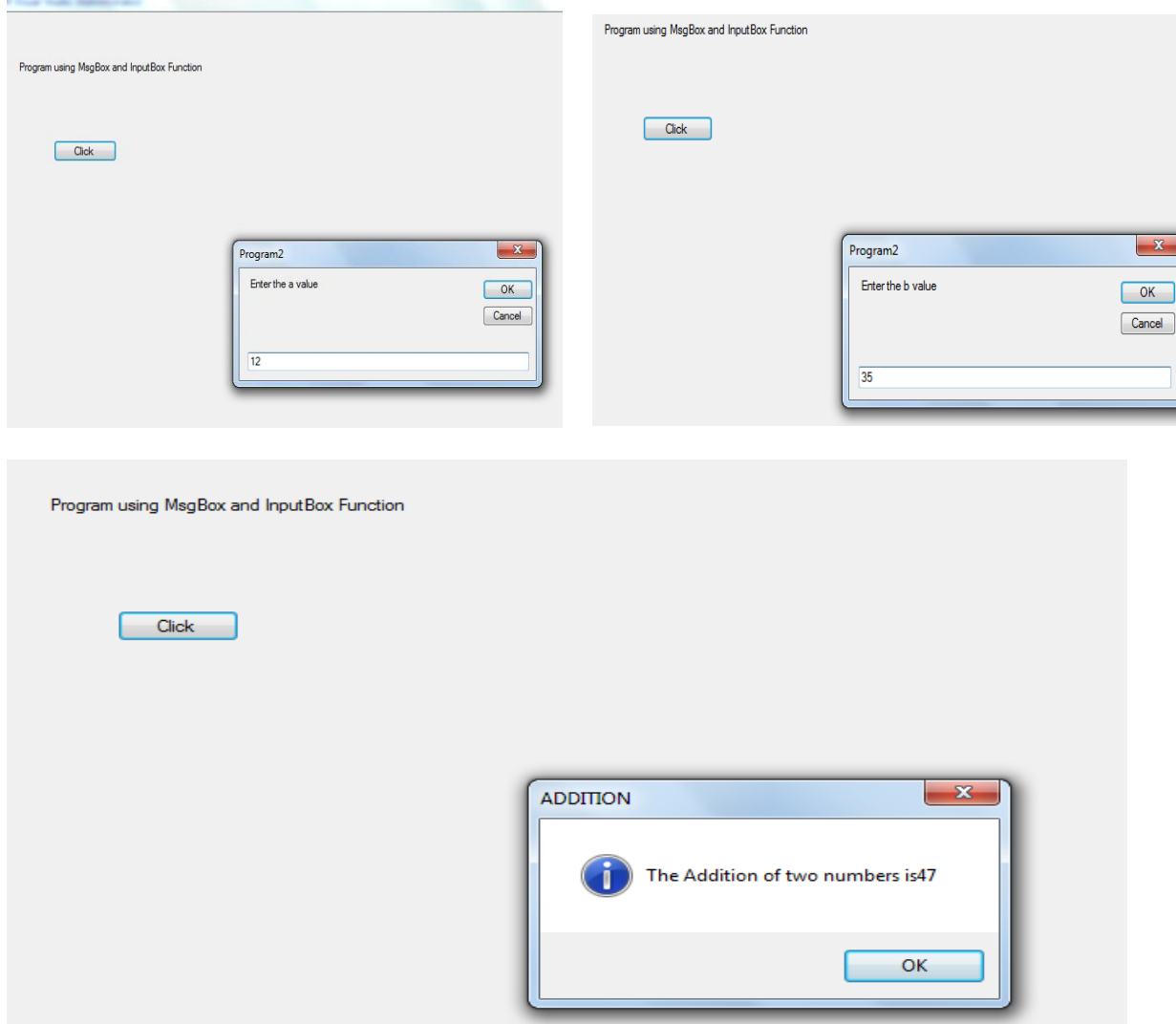


Program:

```
Public Class Form1
    Private Sub Button1_Click_1(ByVal sender As System.Object, ByVal e As System.EventArgs)
```

```
Dim a, b, c As Integer
a = InputBox("Enter the a value")
b = InputBox("Enter the b value")
c = a + b
MsgBox("The Addition of two numbers is" & c, vbInformation, "ADDITION")
End Sub
End Class
```

Sample Output:



Result: Thus the program was executed and the output was verified.

Ex.No 7 ILLUSTRATE THE USE OF CHECKBOX, RADIO BUTTON AND LISTBOX

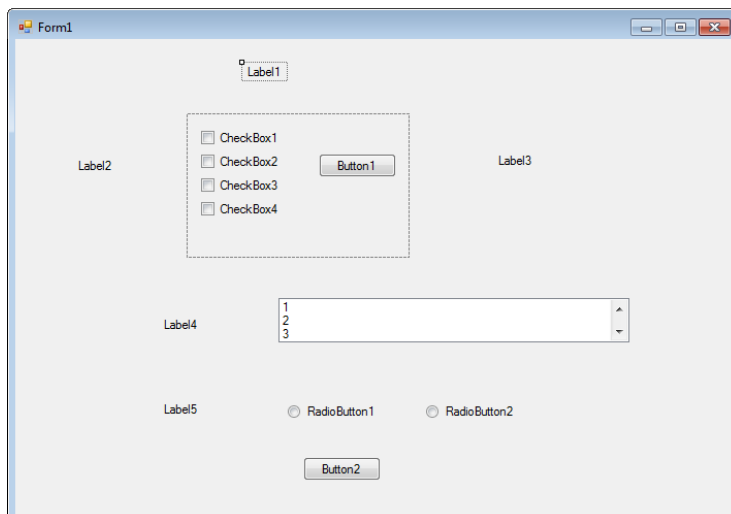
Aim: To write the VB.Net program to illustrate the use of Checkbox, Radio button and List Box.

Procedure:

1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Place the label, button, panel, checkbox, radio button and list box in the window.
4. Write the code in click event of Button1 and Button2
5. Run the application by pressing F5 key or by clicking debug button.

Control Name	Property	Setting
Label1	Text	Program using Checkbox, Radio button and List box
Label2	Text	Select your favorite subject
Label3	Text	
Label4	Text	Select the number
Label5	Text	Select the mode of operation
Ckeckbox1	Text	English
Checkbox2	Text	Tamil
Checkbox3	Text	Maths
Checkbox4	Text	Science
Panel		
Listbox1		1,2,3,4,5,6,7,8,9,10
Radiobutton1	Text	Square
Radiobutton2	Text	Cube
Button1	Text	Select
Button2	Text	Click Me

Form Design



Form Layout

Form1

Program using CheckBox, RadioButton and List Box

Select your Favourite Subject

English
 Tamil
 Maths
 Science

Select

Select the number

1
2
3

Select the Mode of Operation

Square Cube

Click Me

Program:

```
Public Class Form1
```

```
    Dim num As Integer
```

```
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles  
Button1.Click
```

```
        Label3.Text = ""
```

```
        For Each c1 As CheckBox In Panel1.Controls
```

```
            If c1.Checked Then
```

```
                Label3.Text &= c1.Text & vbCrLf
```

```
            End If
```

```
        Next
```

```
        MsgBox("Can i ask question from maths")
```

```
    End Sub
```

```
    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles  
Button2.Click
```

```
        num = ListBox1.SelectedItem
```

```
        If RadioButton1.Checked = True Then
```

```
            MsgBox(num * num)
```

```
        Else
```

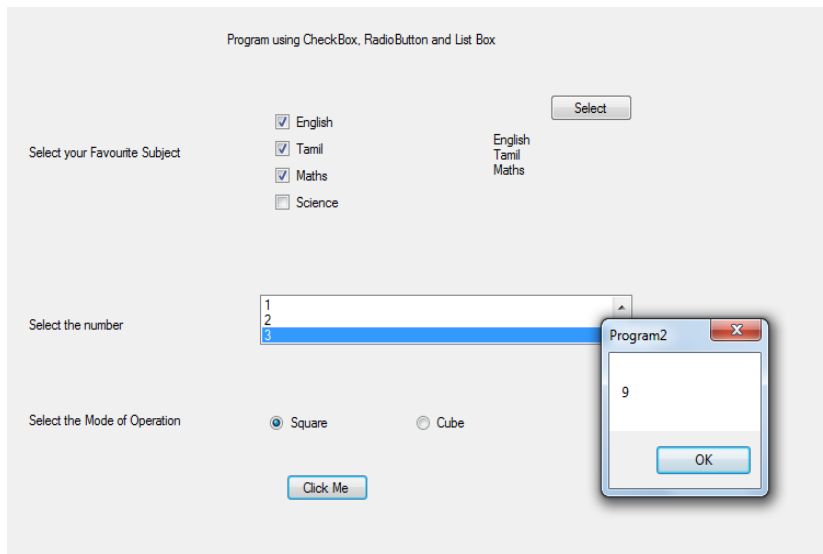
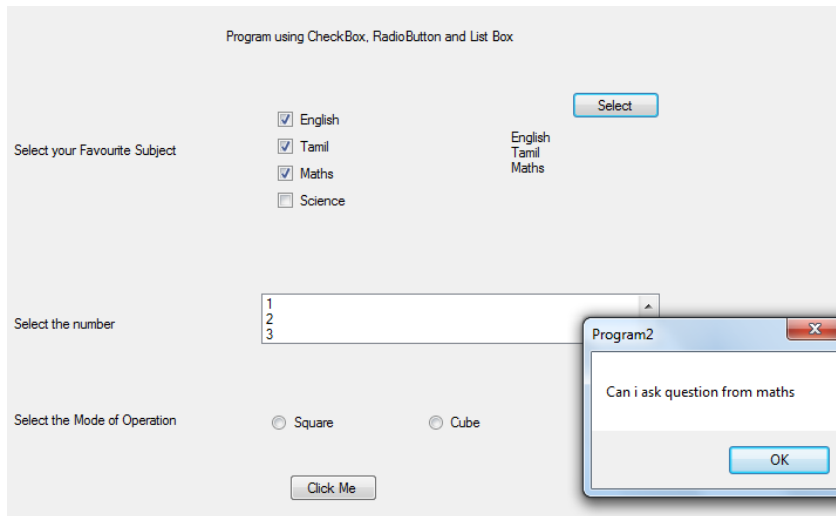
```
            MsgBox(num * num * num)
```

```
        End If
```

```
    End Sub
```

```
End Class
```

Sample Output



Result: Thus the Program was successfully executed

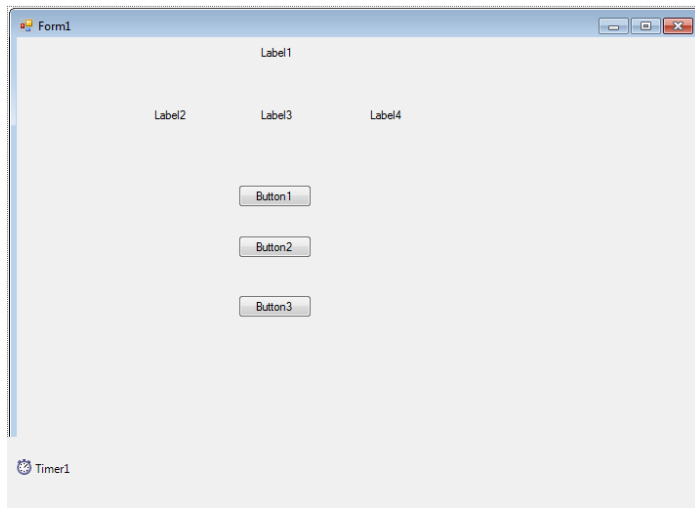
Aim: To write a VB.NET application to implement the timer control

Procedure:

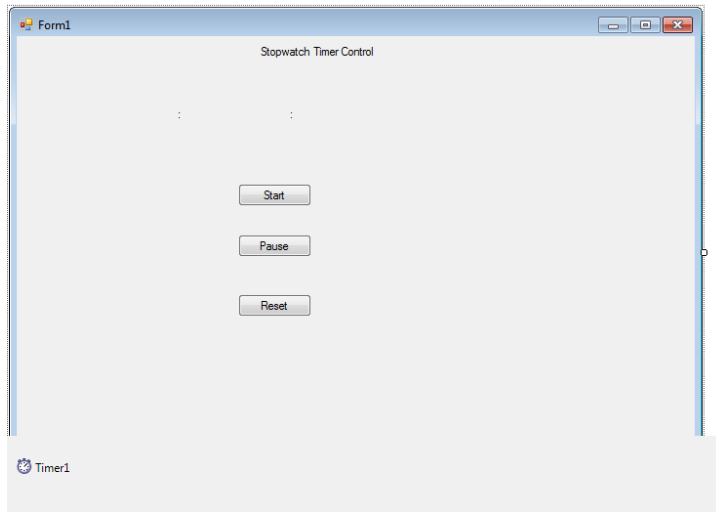
1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Open the Windows application.
4. Place the Timer control, Label box and Buttons from tool box.
5. Write the code in click event of Button1 and Button2
6. Run the application by pressing F5 key or by clicking debug button.

Control Name	Property	Setting
Label1	Text	Stopwatch Timer control
Label2	Text	
Label3	Text	
Label4	Text	
Timer Control	Interval	100
Button1	Text	Start
Button2	Text	Pause
Button3	Text	Reset

Form Layout:



Form Design:



Program:

```
Public Class Form1
    Dim second As Integer = 0
    Dim minute As Integer = 0
    Dim hours As Integer = 0
    Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Timer1.Tick
        second = second + 1
        Label2.Text = second
        If (second = 60) Then
            minute = minute + 1
            second = 0
            Label3.Text = minute
        End If
        If (minute = 60) Then
            hours = hours + 1
            second = 0
            minute = 0
            Label3.Text = minute
            Label4.Text = hours
        End If
    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button1.Click
        Timer1.Start()
    End Sub

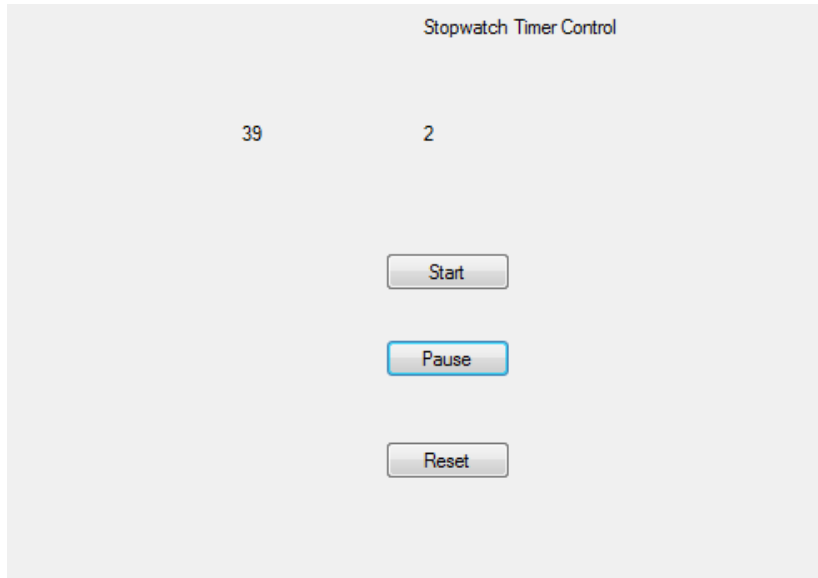
    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button2.Click
        Timer1.Stop()
    End Sub

    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button3.Click
        Timer1.Stop()
    End Sub
End Class
```



```
minute = 0
second = 0
hours = 0
Label2.Text = "00"
Label3.Text = "00"
Label4.Text = "00"
End Sub
End Class
```

Sample Output



Result : Thus the program was successfully executed

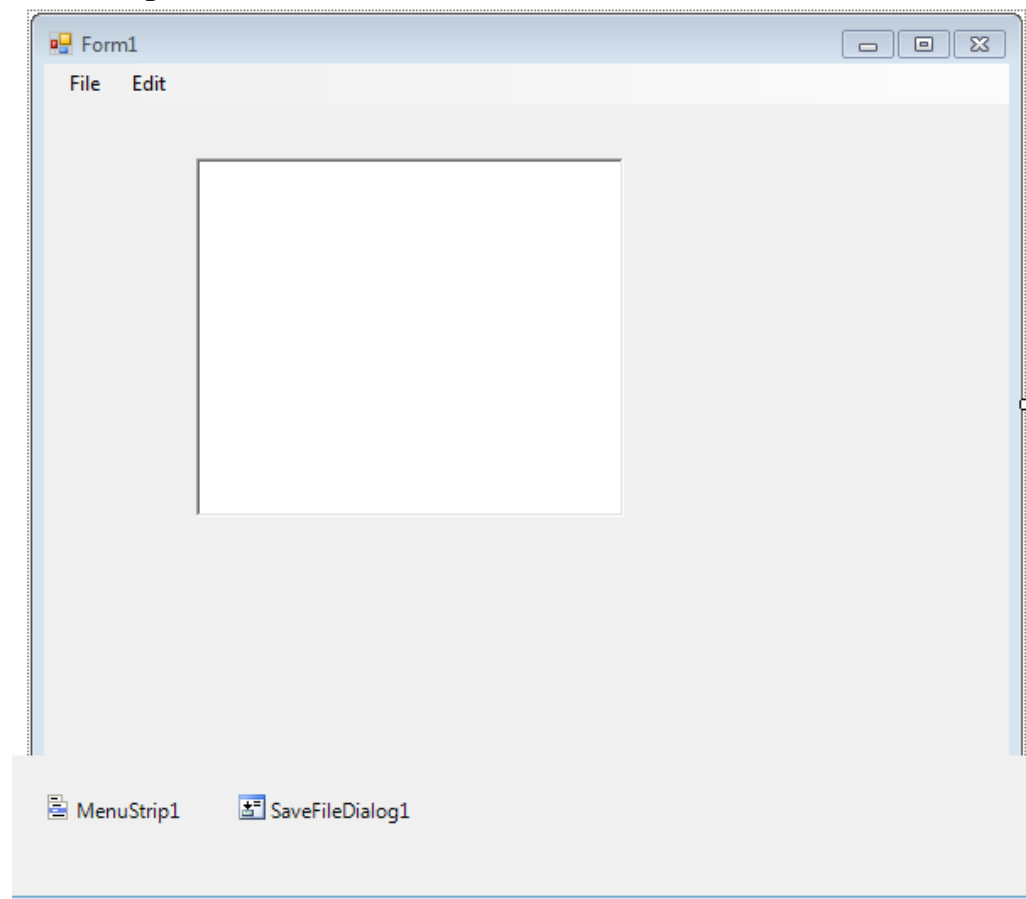
Aim: To write a VB.NET application to implement the text editor using Menu control

Procedure:

1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Open the Windows application.
4. Main menu is constructed with number of sub menus named as close, save, cut, copy, paste.
6. Drag and place a RichTextBox, Save File Dialog Controls in the form.
7. Insert the source code for appropriate menu items and finally run the application.

Control Name	Property	Setting
MenuStrip	-	-
SaveFileDialog	-	-

Form Design



Program

```
Public Class Form1
```

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

```
        SaveFileDialog1.Filter = "TXT Files (*.txt)*.txt"
```

```
        If SaveFileDialog1.ShowDialog = Windows.Forms.DialogResult.OK _
```

```
        Then
```

```
            My.Computer.FileSystem.WriteAllText _
```

```

        (SaveFileDialog1.FileName, RichTextBox1.Text, True)
    End If
End Sub
Private Sub CloseToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles CloseToolStripMenuItem.Click
    End
End Sub

Private Sub CutToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles CutToolStripMenuItem.Click
    RichTextBox1.Cut()
End Sub

Private Sub CopyToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles CopyToolStripMenuItem.Click
    RichTextBox1.Copy()
End Sub

Private Sub PasteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles PasteToolStripMenuItem.Click
    RichTextBox1.Paste()
End Sub
End Class

```

Result: Thus the program was successfully executed.

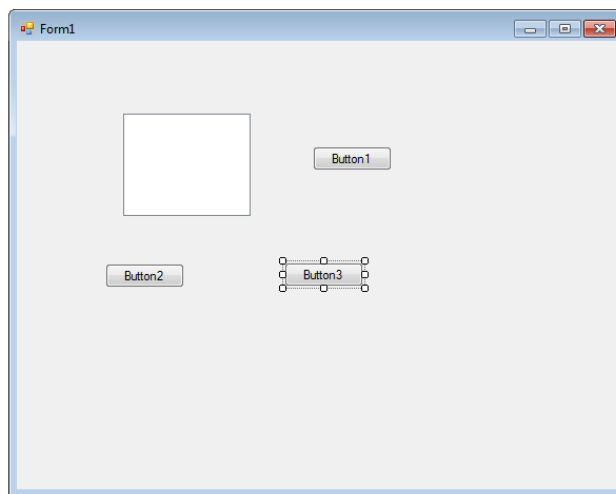
Ex. No: 10**Tree View**

Aim: To write a VB.NET application to implement the concept of Tree View Control and List View Control

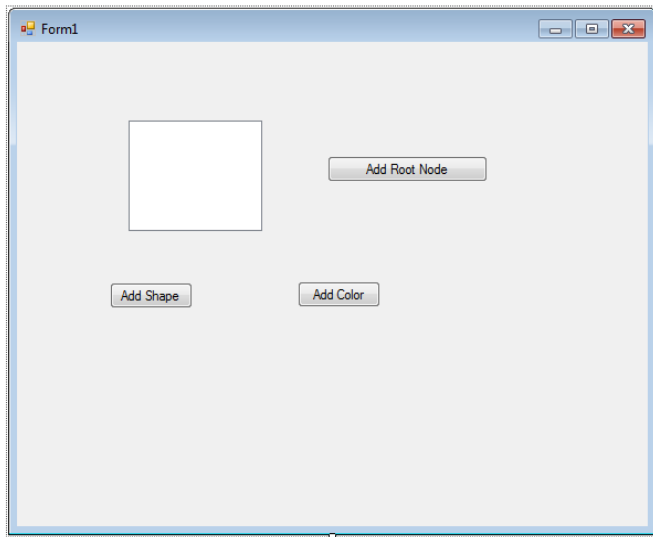
Tree View**Procedure:**

1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Open the Windows application.
4. Drag and place a Tree View, 3 Buttons in the form
5. Insert the source code for appropriate control and finally run the application.

Control Name	Property	Setting
TreeView	-	-
Button1	Text	Add Root Node
Button2	Text	Add Shapes
Button3	Text	Add Colors

Form Layout

Form Design



Program

```
Public Class Form1
```

```
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles  
Button1.Click
```

```
        TreeView1.Nodes.Add("Shapes")
```

```
        TreeView1.Nodes.Add("Colors")
```

```
    End Sub
```

```
    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles  
Button2.Click
```

```
        Dim snode As TreeNode
```

```
        snode = TreeView1.Nodes(0)
```

```
        snode.Nodes.Add("Square")
```

```
        snode.Nodes.Add("Triangle")
```

```
        snode.Nodes.Add("Circle")
```

```
    End Sub
```

```
    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles  
Button3.Click
```

```
        Dim cnode As TreeNode
```

```
        cnode = TreeView1.Nodes(1)
```

```
        cnode.Nodes.Add("Pink")
```

```
        cnode.Nodes.Add("Maroon")
```

```
        cnode.Nodes.Add("Teal")
```

```
    End Sub
```

```
End Class
```

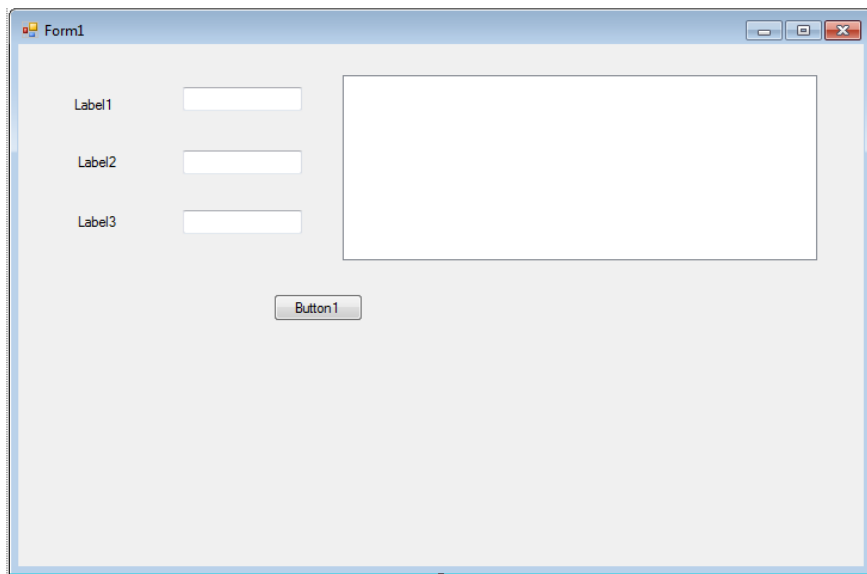
ListView

Procedure:

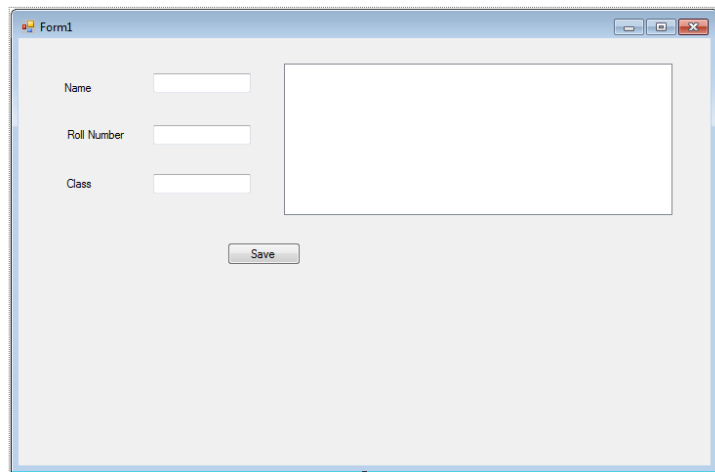
1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Open the Windows application.
4. Drag and place a List View, 3 TextBoxes and 3 Labels and 1 Button control in the form
5. Insert the source code for appropriate controls and finally run the application.

Control Name	Property	Setting
ListView	-	-
Label1	Text	Name
Label2	Text	Roll Number
Label3	Text	Class
TextBox1	-	-
TextBox2	-	-
TextBox3	-	-
Button1	Text	Save

Form Layout



Form Design



Program:

```

Public Class Form1
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button1.Click
        Dim str(4) As String
        Dim itm As ListViewItem
        str(0) = TextBox1.Text 'Accept value from the user.
        str(1) = TextBox2.Text
        str(2) = TextBox3.Text
        itm = New ListViewItem(str)
        ListView1.Items.Add(itm) 'Add the items into the ListView
    End Sub
    Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
MyBase.Load
        ListView1.View = View.Details ' Display the List in details
        ListView1.GridLines = True ' Set the Grid lines
        ListView1.Columns.Add("Student Name", 100, HorizontalAlignment.Left) ' set the name of column
        ListView1.Columns.Add("Roll Number", 100, HorizontalAlignment.Left) ' set the name of column
        ListView1.Columns.Add("Class", 100, HorizontalAlignment.Left) ' set the name of column
        ListView1.BackColor = Color.LightSkyBlue
    End Sub
End Class

```

Result : Thus the program was successfully executed.

Ex. No: 11

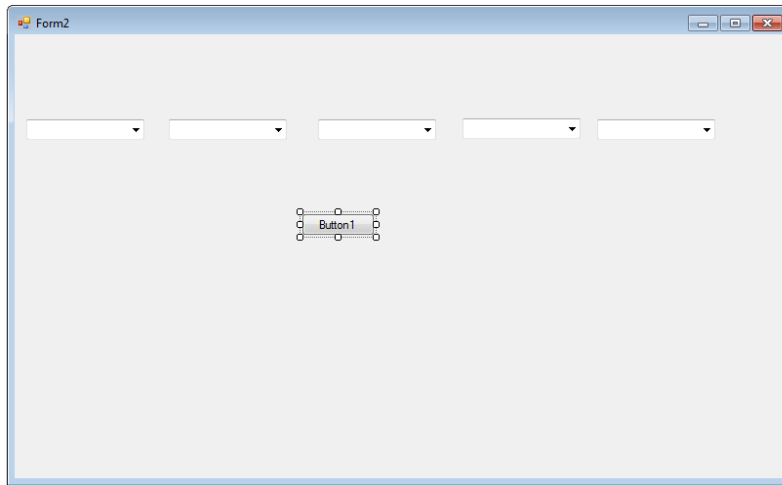
Combo Box

Aim: To write a VB.NET application to implement the concept of combo box using class

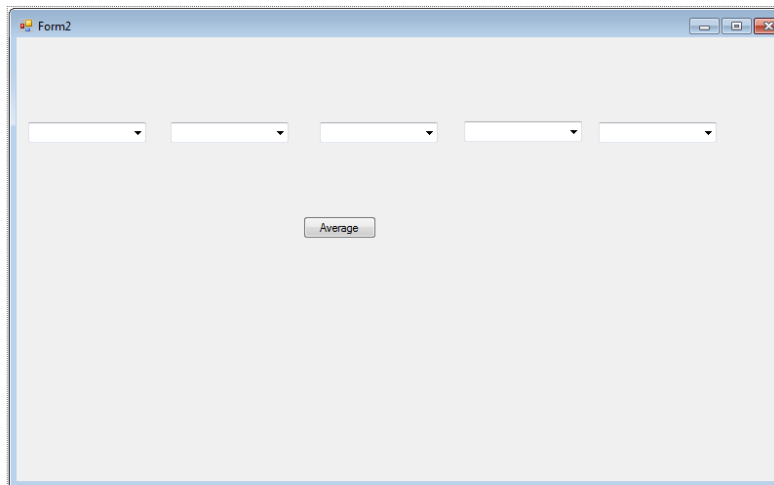
Procedure:

1. Click Start→Programs→MicrosoftVisualStudio 2005 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Open the Windows application.
4. Drag and place a 5 Combo boxes and 1 Button control in the form.
5. Insert the source code for appropriate controls and finally run the application.

Form Layout



Form Design



```
Public Class Form1
```

```
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles  
    Button1.Click
```

```
        Dim average As Single
```

```
        average = (Val(ComboBox1.Text) + Val(ComboBox2.Text) + Val(ComboBox3.Text) +  
Val(ComboBox4.Text) + Val(ComboBox5.Text)) / 5
```

```
        MsgBox("Average = " & average)
```

```
    End Sub
```



```
Private Sub Form1_Load (ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
    ComboBox1.Items.Add(5)
    ComboBox1.Items.Add(8)
    ComboBox1.Items.Add(12)
    ComboBox2.Items.Add(20)
    ComboBox2.Items.Add(32)
    ComboBox2.Items.Add(6)
    ComboBox3.Items.Add(11)
    ComboBox3.Items.Add(17)
    ComboBox3.Items.Add(24)
    ComboBox4.Items.Add(36)
    ComboBox4.Items.Add(100)
    ComboBox4.Items.Add(34)
    ComboBox5.Items.Add(20)
    ComboBox5.Items.Add(90)
    ComboBox5.Items.Add(23)
End Sub
End Class
```

Result : Thus the program was successfully executed.

Aim: To develop a VB.Net application for database connectivity using MS-Access

Procedure:

1. Click Start→Programs→MicrosoftVisualStudio 20015 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Open the Windows application.
4. Drag and place a 5 labels ,5 text box and 1 buttons in the form.
5. Insert the source code for appropriate Controls and finally run the application.

Control Name	Property	Setting
Label1	Text	Name
Label2	Text	Roll Number
Label3	Text	Register Number
Label4	Text	Class
Label5	Text	Phone Number
Button1	Text	Store

Form Design:

The screenshot shows a standard Windows application window with a title bar containing the text 'Form2'. The window's content area is light gray and contains five text input fields arranged vertically. Each field is preceded by a label: 'Name', 'Roll Number', 'Register Number', 'Class', and 'Phone Number'. Below the input fields is a single button labeled 'Store'. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

Program

```
Imports System.Data.OleDb
Imports System.Data
Public Class Form3
    Dim cmd As OleDbCommand
    Dim da As OleDbDataAdapter
    Dim dr As OleDbDataReader
    Dim variable As String
```

```

Dim con As New OleDbConnection("Provider=Microsoft.Jet.OLEDB.4.0;Data
Source=C:\Users\user\Documents\benazirbutto\student1.mdb")
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button1.Click
    con.Open()
    cmd = New OleDbCommand("insert into student1 values(" & TextBox1.Text & "," &
TextBox2.Text & "," & TextBox3.Text & "," & TextBox4.Text & "," & TextBox5.Text &
")", con)
    cmd.ExecuteNonQuery()
    MsgBox("Records inserted successfully")
    con.Close()
    TextBox1.Text = ""
    TextBox2.Text = ""
    TextBox3.Text = ""
End Sub

```

Result : Thus the Program was executed Successfully.

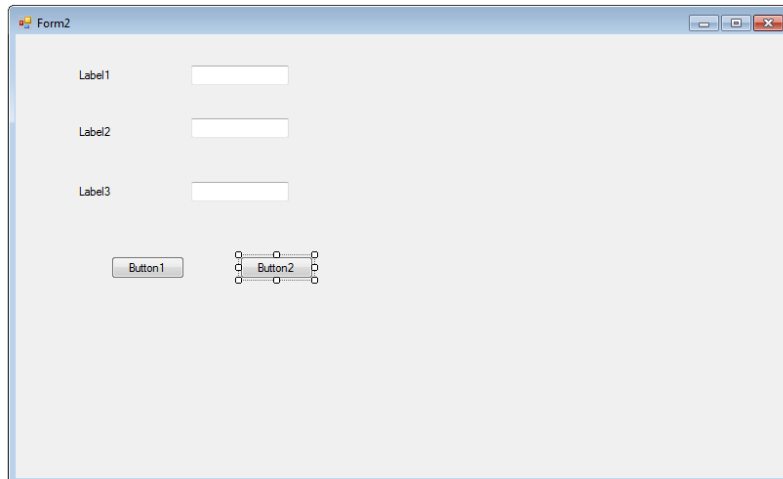
Aim: To develop a VB.Net application for database connectivity using MS-Access

Procedure:

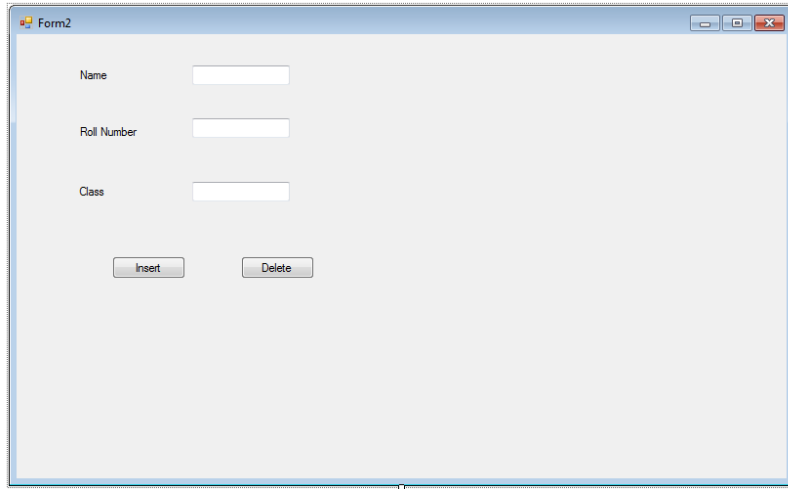
1. Click Start→Programs→MicrosoftVisualStudio 20015 → MicrosoftVisualStudio 2005
2. Select File → New→ Project → Windowsapplication.
3. Open the Windows application.
4. Drag and place a 3 labels ,3 text box and 2 buttons in the form.
5. Insert the source code for appropriate Controls and finally run the application.

Control Name	Property	Setting
Label1	Text	Name
Label2	Text	Roll Number
Label3	Text	Class
Textbox1	--	--
Textbox2	--	--
Textbox3	--	--
Button1	Text	Insert
Button2	Text	Delete

Form Layout



Form Design



Program

```
Imports System.Data.OleDb
Imports System.Data
Public Class Form3
    Dim cmd As OleDbCommand
    Dim da As OleDbDataAdapter
    Dim dr As OleDbDataReader
    Dim variable As String
    Dim con As New OleDbConnection("Provider=Microsoft.Jet.OLEDB.4.0;Data
Source=C:\Users\user\Documents\benazirbutto\student1.mdb")
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button1.Click
        con.Open()
        cmd = New OleDbCommand("insert into student1 values(" & TextBox1.Text & "," &
TextBox2.Text & "," & TextBox3.Text & ")", con)
        cmd.ExecuteNonQuery()
        MsgBox("Records inserted successfully")
        con.Close()
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
    End Sub
    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Button2.Click
        con.Open()
        cmd = New OleDbCommand("delete from student1 where rollno=" & TextBox1.Text, con)
        cmd.ExecuteNonQuery()
        con.Close()
        MsgBox("record deleted successfully", MsgBoxStyle.Information)
    End Sub
End Class
```

Result : Thus the program was executed successfully.