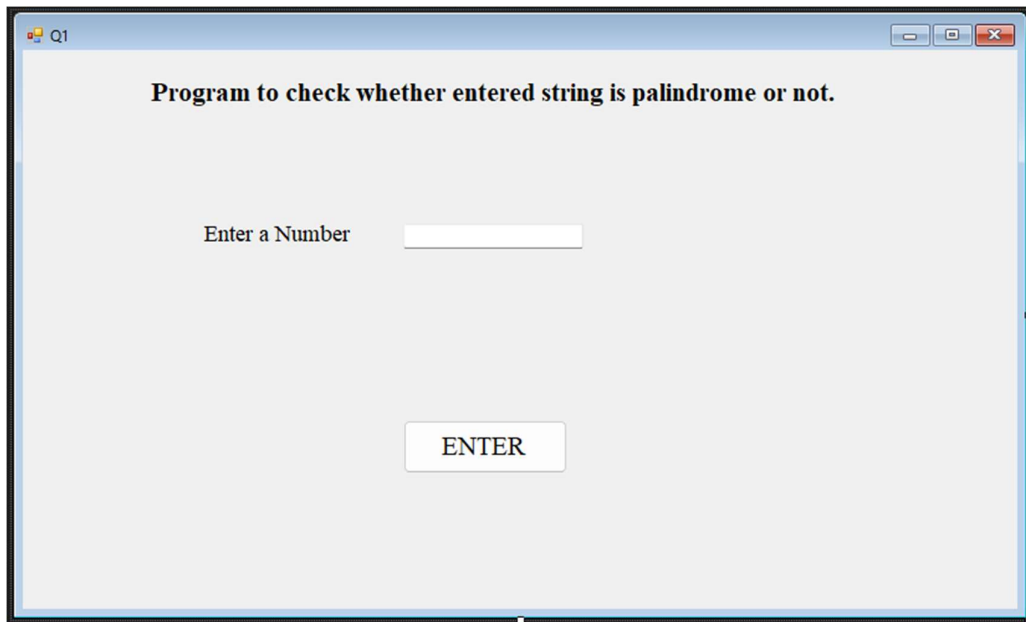# .NET JOURNAL PROGRAMS

Q1. Write a Vb.net program to check whether entered string is palindrome or not.


```
Public Class Q1

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

        Dim str1 As String

        str1 = TextBox1.Text

        If str1 = StrReverse(str1) Then

            MsgBox("String is palindrome")

        Else

            MsgBox("String is not palindrome")

        End If

    End Sub

End Class
```
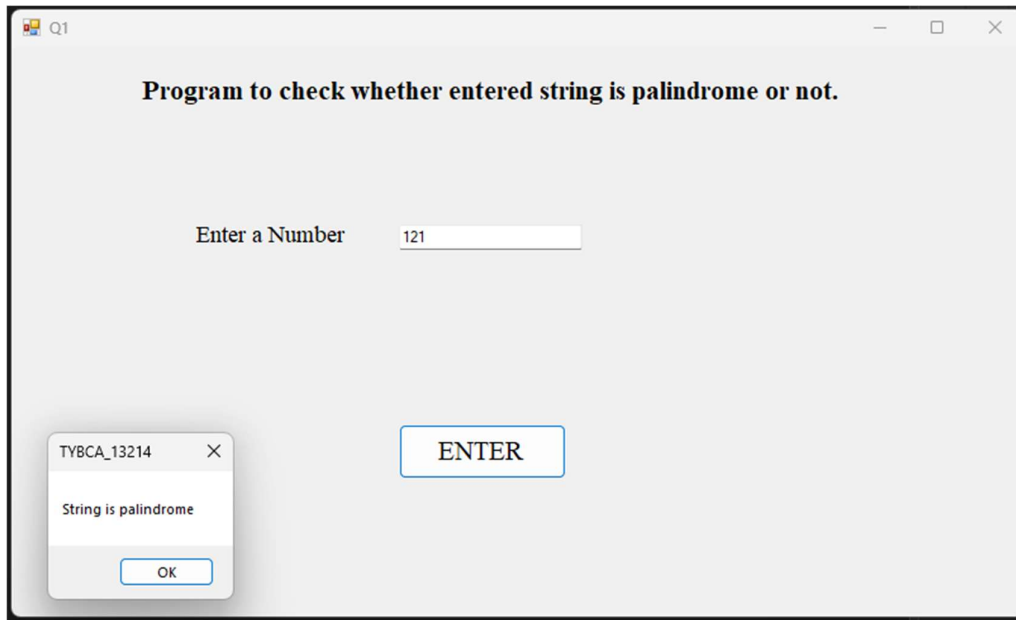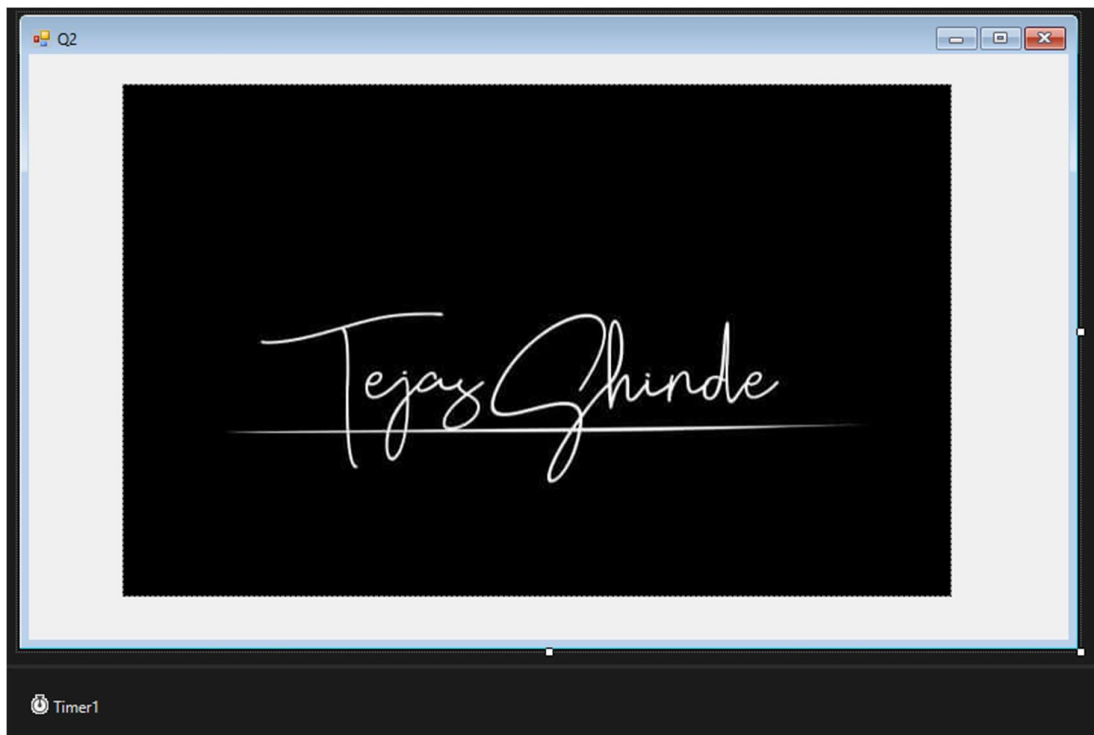
OUTPUT: -

Q2. Write a Vb.net program for blinking an image.

Public Class Q2

   Private Sub Timer1_Tick(sender As Object, e As EventArgs) Handles Timer1.Tick

```vbnet
    If PictureBox1.Visible = Visible Then

        PictureBox1.Visible = False

    Else

        PictureBox1.Visible = True

    End If

  End Sub

End Class
```
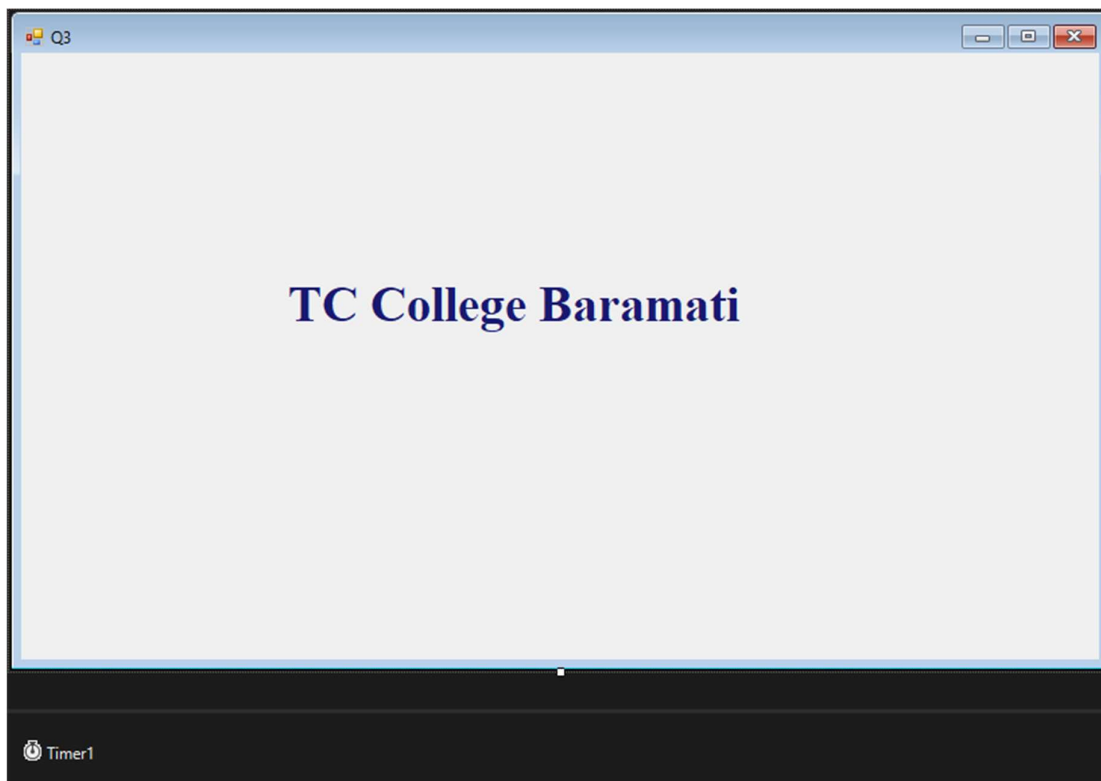
Q3. Write a Vb.Net program to move the Text "TC College" continuously from Left to Right.


```vbnet
Public Class Q3

    Private Sub Timer1_Tick(sender As Object, e As EventArgs) Handles Timer1.Tick

        Label1.Left = Label1.Left + 10

        If Label1.Left >= Me.Right Then
```

```vb
        Label1.Left = Me.Left

    End If

End Sub

End Class
```

Q4. Write a Vb.net program to accept a number from an user through InputBox and display its multiplication table into the ListBox.


```vb
Public Class Q4

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

        Dim n As Integer

        ListBox1.Items.Clear()

        n = CInt(InputBox("Enter number: "))

        For i = 1 To 10

            ListBox1.Items.Add(n * i)

        Next

    End Sub

End Class
```
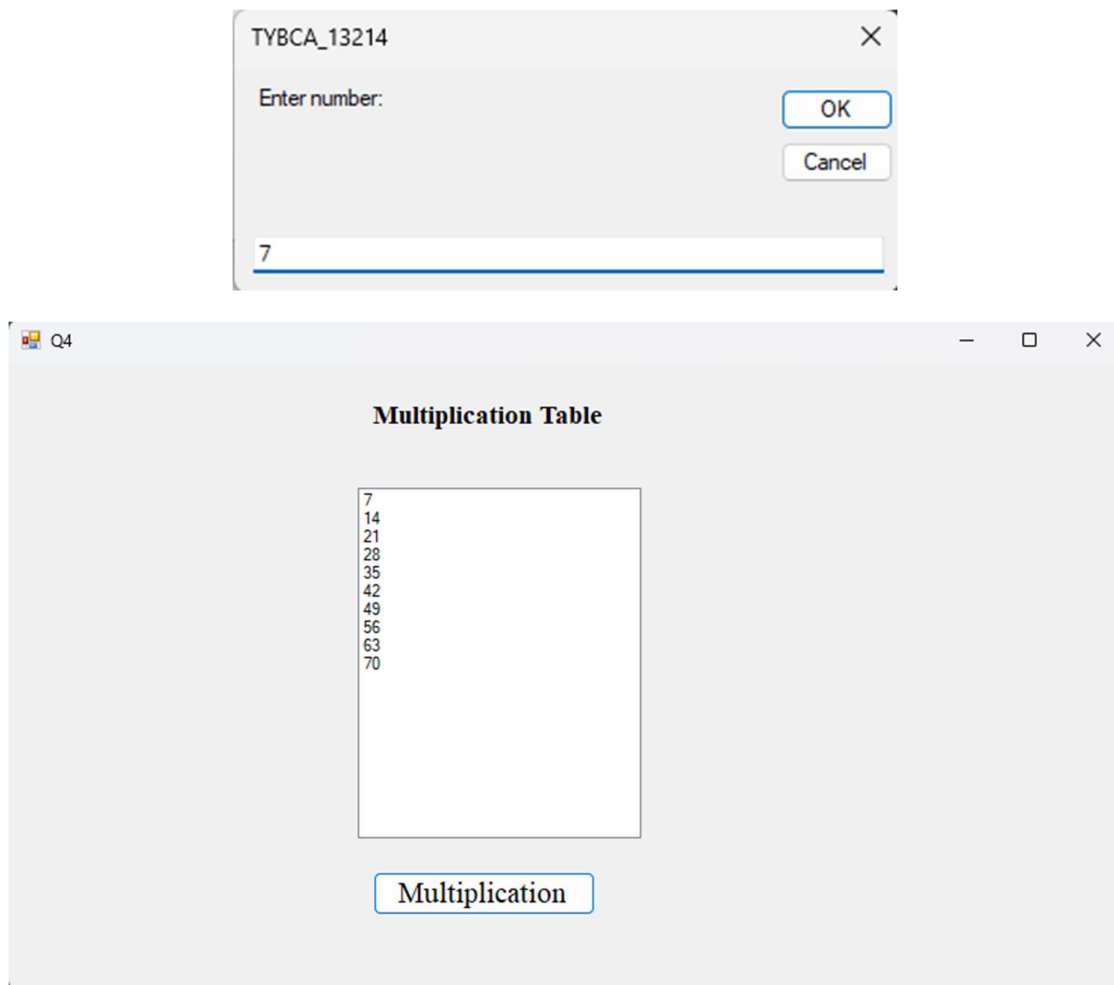
OUTPUT: -

TYBCA_13214

Enter number:

OK

Cancel

7

Q4

Multiplication Table

```
7
14
21
28
35
42
49
56
63
70
```

Multiplication

Q5. Write a Vb.net program to accept n numbers through InputBox and count the number of Armstrong and Perfect numbers among them and display their count by using messagebox
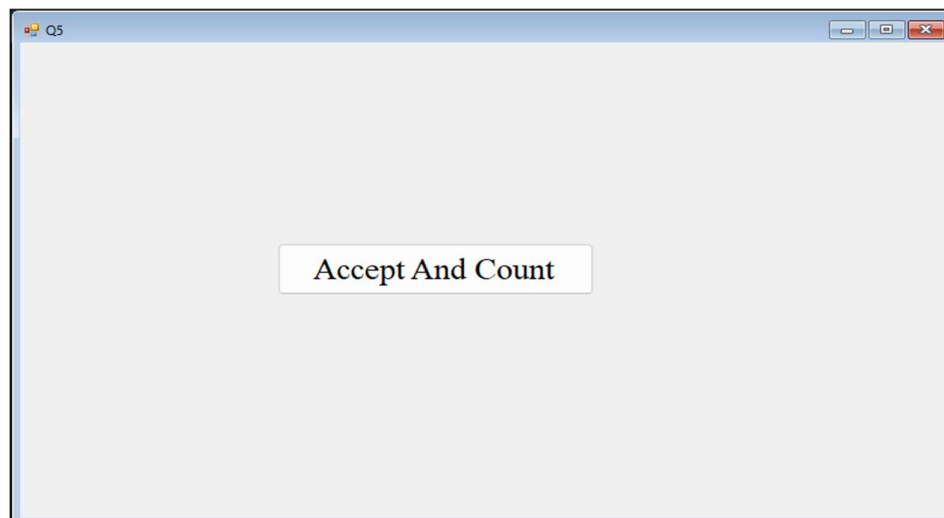
Q5

Accept And Count

Public Class Q5

```vb
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim n As Integer
    Dim a(10) As Integer
    Dim prime As Integer
    Dim remainder, sum, copy As Integer
    Dim c, cn As Integer
    n = InputBox("Enter how many number: ")
    For i As Integer = 0 To n - 1
        a(i) = InputBox("Enter Element:- ", i)
    Next
    prime = 0
    For i As Integer = 0 To n - 1
        For j As Integer = 2 To a(i) / 2
            If a(i) Mod j = 0 Then
                prime = 1
                Exit For
            End If
        Next
        If prime = 0 Then
            c = c + 1
        End If
        copy = a(i)
        sum = 0
        While a(i) > 0
            remainder = a(i) Mod 10
            sum = (remainder * remainder * remainder) + sum
            a(i) = a(i) \ 10
```

End While

If copy = sum Then
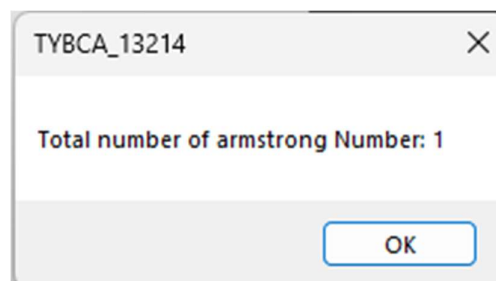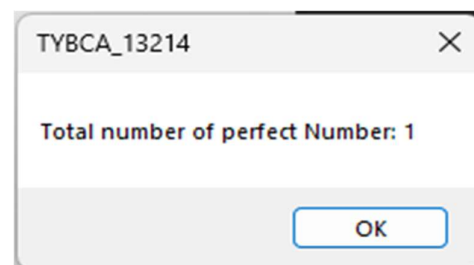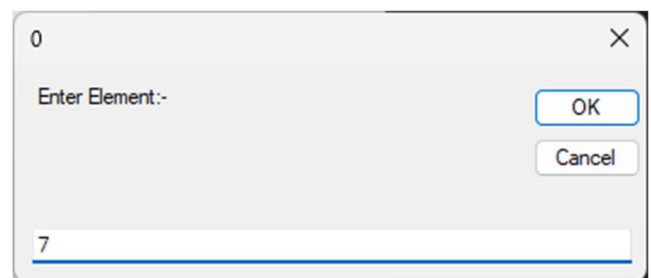
cn = cn + 1

End If

prime = 0

Next
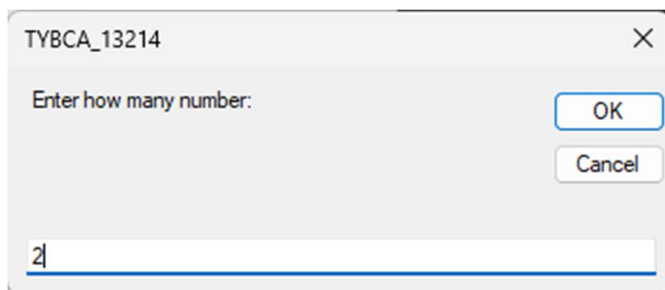
MsgBox("Total number of perfect Number: " + CStr(c))

MsgBox("Total number of armstrong Number: " + CStr(cn))

End Sub

End Class

Output: -

TYBCA_13214		
Enter how many number:	OK	
	Cancel	
2		

0		
Enter Element:-	OK	
	Cancel	
7		

1		
Enter Element:-	OK	
	Cancel	
371		

TYBCA_13214	
Total number of perfect Number: 1	
	OK

TYBCA_13214	
Total number of armstrong Number: 1	
	OK

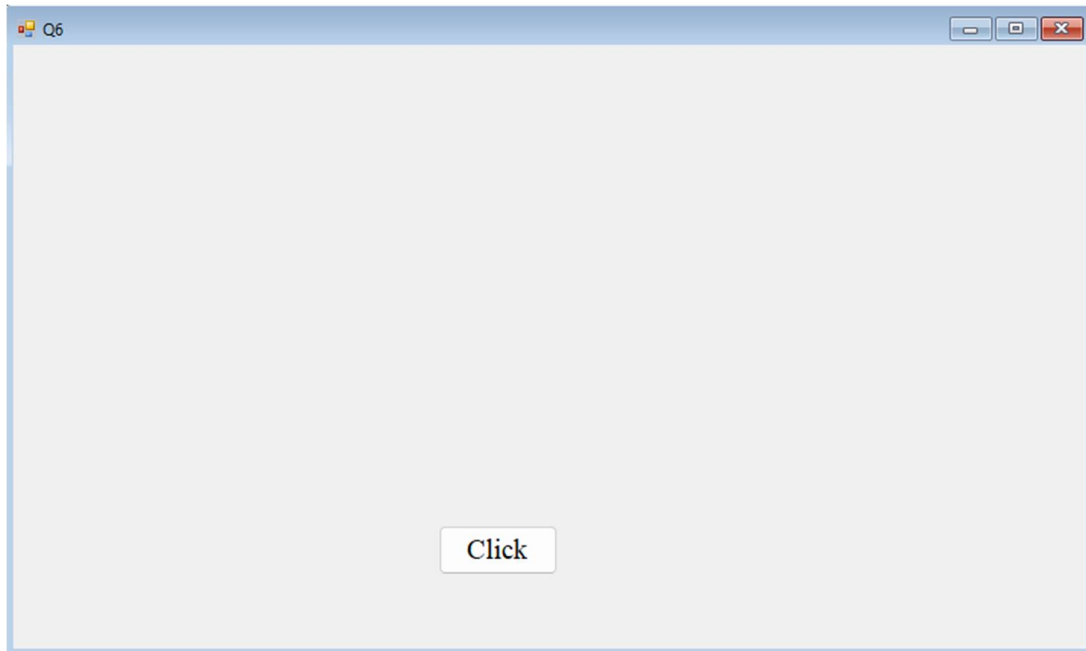Q6. Write a Vb.net program to add two TextBoxes, two Labels and one button at runtime. Accept two numbers in textboxes and handle DivideByZeroException.

Public Class Q6

```
    Dim t1 As New TextBox

    Dim t2 As New TextBox

    Dim l1 As New Label

    Dim l2 As New Label

    Dim b1 As New Button

    Dim n As Integer

    Private Sub Q6_Load(sender As Object, e As EventArgs) Handles MyBase.Load

        l1.Top = 100

        l1.Left = 100

        l1.Text = "Enter 1st Number"

        l1.Visible = True

        Me.Controls.Add(l1)


        l2.Text = "Enter 2nd Number"

        l2.Top = 100
```

```
        l2.Left = 300

        l2.Visible = True

        Me.Controls.Add(l2)


        t1.Top = 125

        t1.Left = 100

        t1.Visible = True

        Me.Controls.Add(t1)


        t2.Top = 125

        t2.Left = 300

        t2.Visible = True

        Me.Controls.Add(t2)



        b1.Text = "Divide"

        b1.Top = 190

        b1.Left = 220

        b1.Visible = True

        Me.Controls.Add(b1)


        AddHandler Button1.Click, AddressOf Button1_Click_1
    End Sub
    Private Sub Button1_Click_1(sender As Object, e As EventArgs)
        Try
            n = CInt(t1.Text) \ CInt(t2.Text)

            MsgBox(n)
```
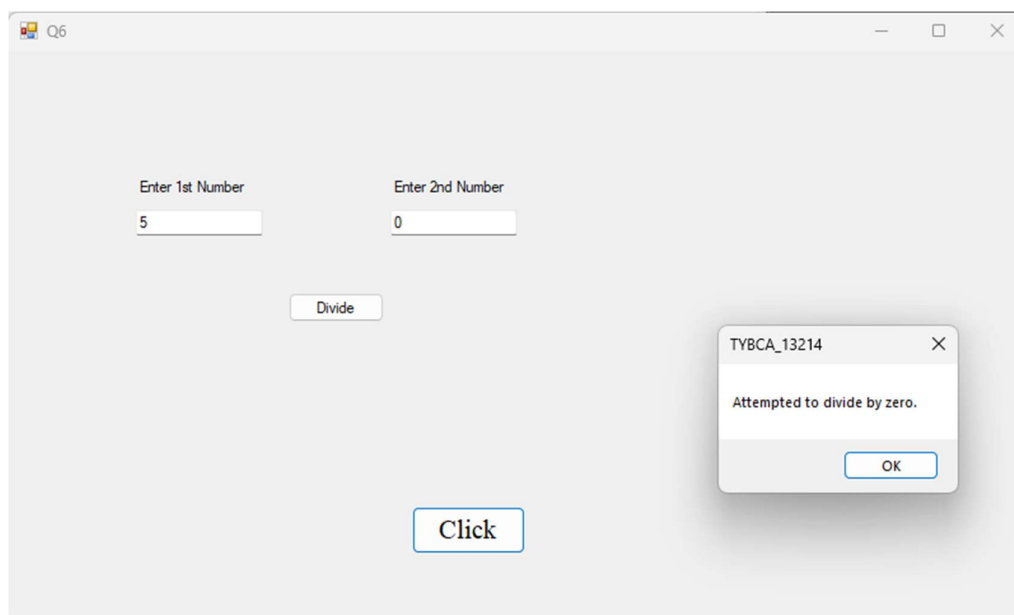
Catch ex As DivideByZeroException

        MsgBox(ex.Message)

    End Try

  End Sub

Output: -

Q7. Write a Vb.net program to design following screen, accept the details from the user. Clicking on Submit button Net Salary should be calculated and displayed into the TextBox. Display the MessageBox informing the Name and Net Salary of employee.

Employee Profile

Name	
Basic Salary	
DA	
HRA	
MA	
PF	
PT	
IT	
Submit	
Net Salary	

Public Class Q7

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

    Dim cal, tax, bs, da, hra, ma, pf, pt, it As Integer

    bs = CInt(TextBox2.Text)

    da = CInt(TextBox3.Text)

    hra = CInt(TextBox4.Text)

    ma = CInt(TextBox5.Text)

    pf = CInt(TextBox6.Text)

    pt = CInt(TextBox7.Text)

    it = CInt(TextBox8.Text)

    cal = bs + ((da * bs) / 100) + ((hra * bs) / 100) + ((ma * bs) / 100)

    tax = ((pt * bs) / 100) + ((it * bs) / 100) + ((pf * bs) / 100)

    cal = cal - tax

    TextBox9.Text = cal

    MsgBox("Name: " + TextBox1.Text + " Net salary: " + TextBox9.Text)

End Sub

End Class

Output: -

Q8. Write a Vb.net program to accept number from user into the TextBox. Calculate the square root of that number also convert the entered number into binary number and display result into the Message Box

```
Public Class Q8

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

        Dim n As Integer

        Dim sqr As Double

        Dim rm As Integer

        Dim str1 As String

        n = CInt(TextBox1.Text)

        sqr = Math.Sqrt(n)

        While n

            rm = n Mod 2

            str1 = str1 & rm

            n = n / 2

        End While

        MessageBox.Show("Square Root:" & sqr & "Binary Number:" & str1)

        StrReverse(str1)

    End Sub

End Class
```
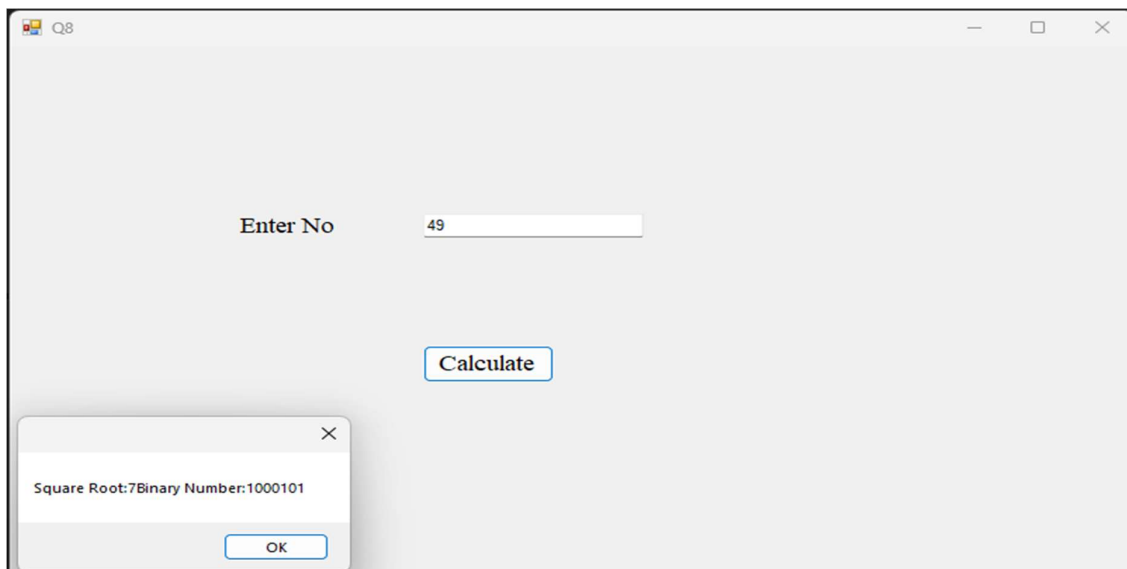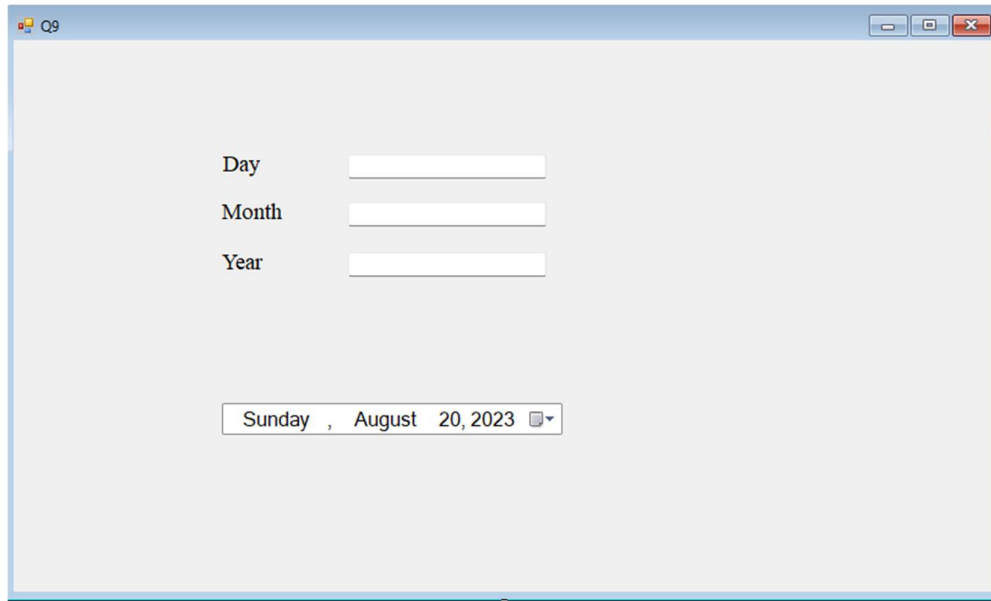
Output: -

Q9. Design a Vb.net form to pick a date from DateTimePicker Control and display day, month and year in separate text boxes.

Public Class Q9

   Private Sub DateTimePicker1_ValueChanged(sender As Object, e As EventArgs) Handles DateTimePicker1.ValueChanged
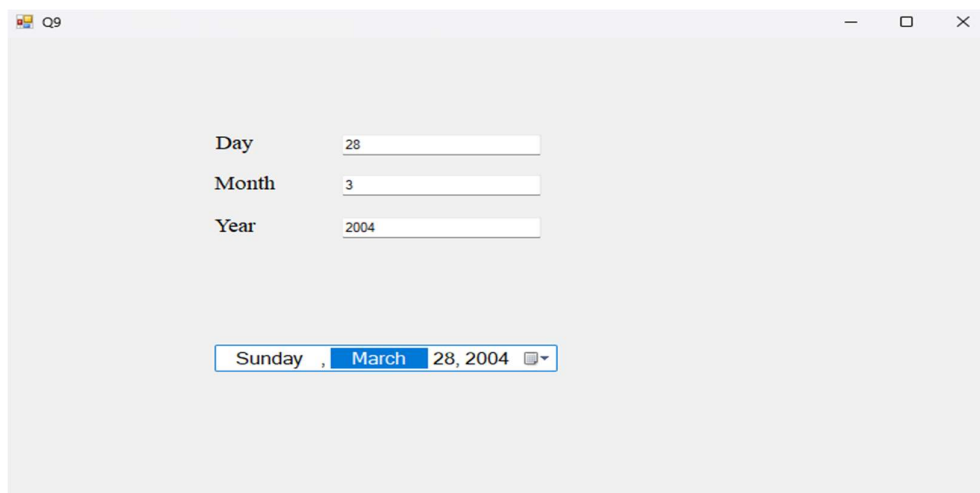
      TextBox1.Text = DateTimePicker1.Value.Day

      TextBox2.Text = DateTimePicker1.Value.Month

      TextBox3.Text = DateTimePicker1.Value.Year

   End Sub

End Class

Output: -

Q10. Write a Vb.net program to accept a character from keyboard and check whether it is vowel or not. Also display the case of that character.
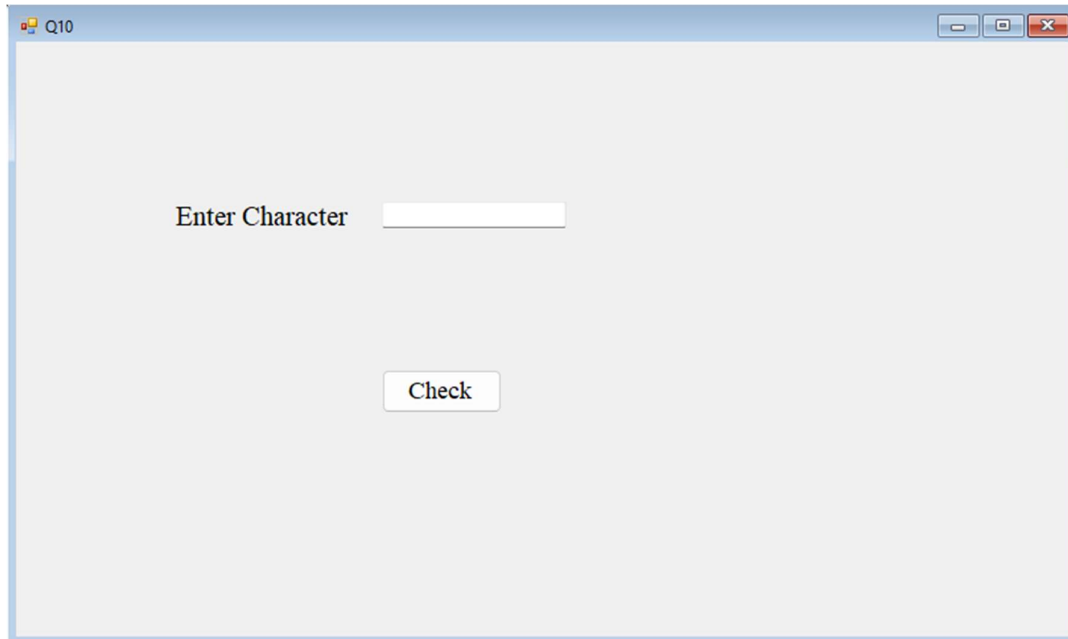

```vbnet
Public Class Q10

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

        Dim ch As Char

        ch = TextBox1.Text

        Select Case ch

            Case "A", "E", "I", "O", "U"

                MessageBox.Show(ch + " is Vowel And UpperCase")

            Case "a", "e", "i", "o", "u"

                MessageBox.Show(ch + " is Vowel And LowerCase")

            Case Else

                MessageBox.Show(ch + " is Not Vowel")

        End Select

    End Sub

End Class
```

Output: -
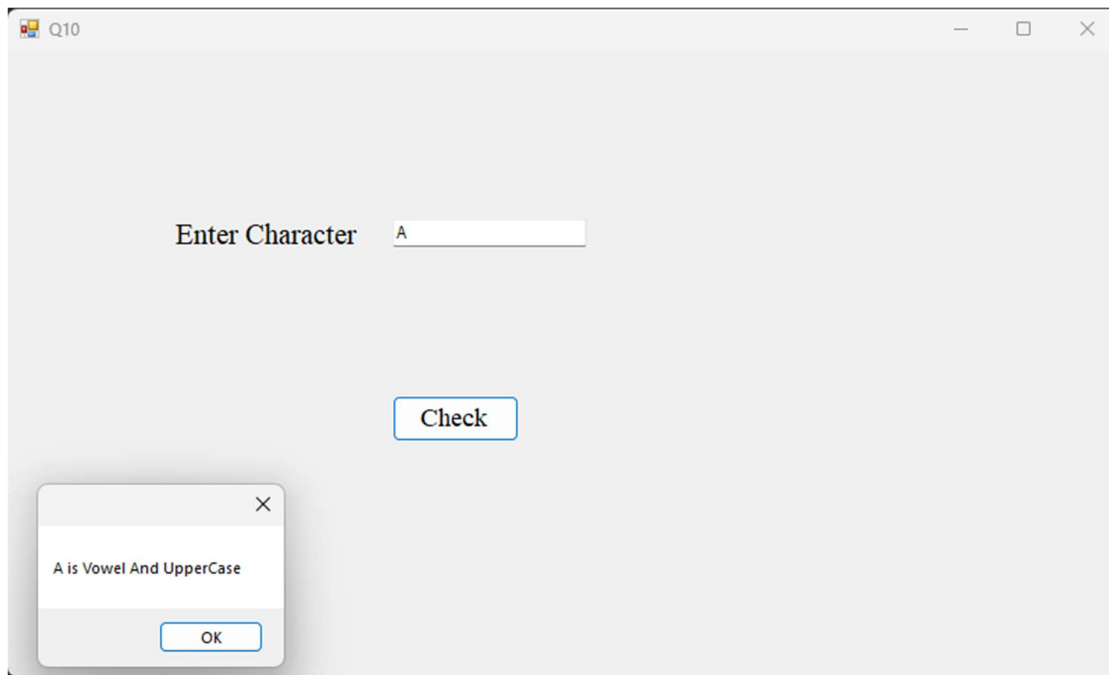
Q11. Write a Vb.net program to accept sentences in text box and count the number of words and display the count in message box.
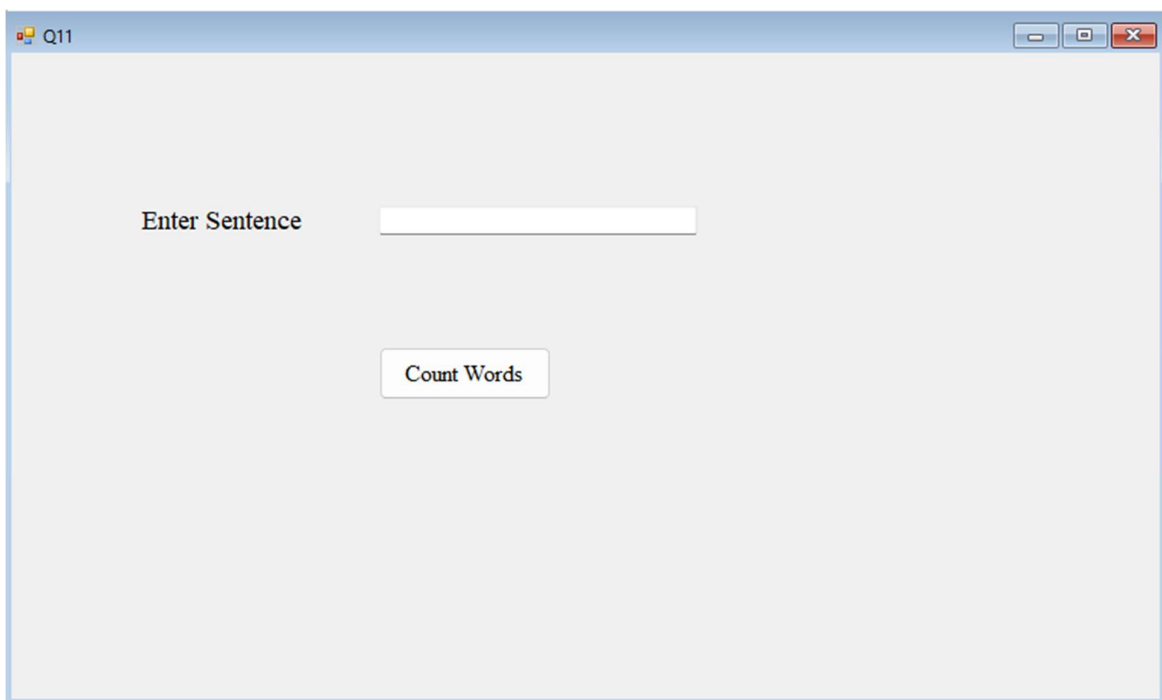
Public Class Q11

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

```vb
        Dim sentence As String

        Dim i As Integer

        Dim wc As Integer

        sentence = TextBox1.Text

        Dim arr() As Char = sentence.ToCharArray

        For i = 0 To arr.Length - 1

            If arr(i) = " " Then

                wc = wc + 1

            End If

        Next

        MsgBox("Total Words: " & wc + 1)

    End Sub
End Class
```

Output: -
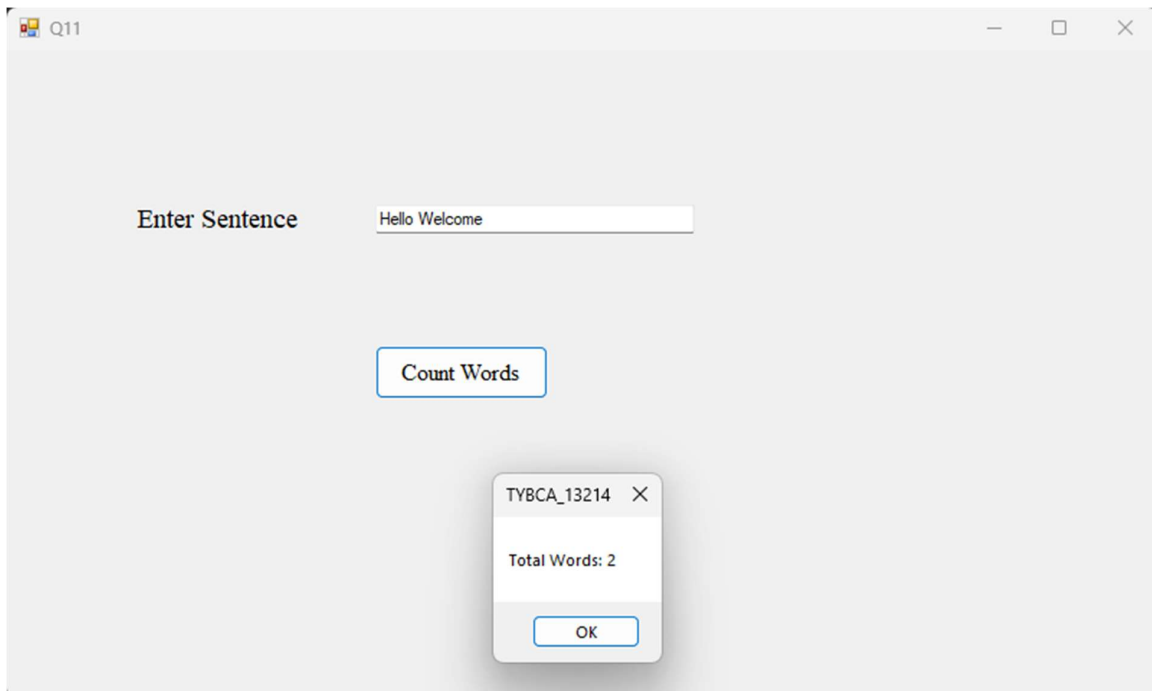
Q12. Write a Vb.net program to design the following form, accept the numbers through textbox and add them into the ListBoxe1 by clicking on Add button. When user click on Prime button then all the prime numbers from ListBox1 should get added into ListBox2.

Public Class Q12

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

     ListBox1.Items.Add(CInt(TextBox1.Text))

     TextBox1.Text = ""

     TextBox1.Focus()

   End Sub

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

     Dim n, i, mm, count, contain As Integer

     For i = 0 To ListBox1.Items.Count() - 1

       n = ListBox1.Items.Item(i)

       count = CInt(n) / 2

       mm = 1

       For j As Integer = 2 To count

         If n Mod j = 0 Then

           mm = 0

```
        End If

    Next


    If mm = 1 Then

        ListBox2.Items.Add(CInt(n))

    End If

Next

contain = ListBox1.Items.Count() - 1 ' 4

i = 0

While True

    If contain >= i Then

        n = ListBox1.Items.Item(i)

        count = CInt(n) / 2

        mm = 1

        For j As Integer = 2 To count

            If n Mod j = 0 Then

                mm = 0

            End If

        Next

        If mm = 1 Then

            ListBox1.Items.RemoveAt(i)

        Else

            i = i + 1

        End If

        contain = ListBox1.Items.Count() - 1

    Else

        Exit While
```

End If

End While

End Sub

End Class

Output: -

Q13. Write a Vb.net program to design the following form, allow the user to select radio buttons from Gender and Age Panel. After Selection appropriate CheckBox from Right Panel should be selected automatically. Display appropriate message into the MessageBox by clicking on Ok button.


```vbnet
Public Class Q13
  Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    If TextBox1.Text = "" Then
      MessageBox.Show("Please Enter Name")
    Else
      Dim age As String
      age = ""
      If RadioButton3.Checked Then
        age = "Less Than 18. Can't Drive "
      ElseIf RadioButton4.Checked Then
        age = "Between 18 To 40 . Can Drive"
      ElseIf RadioButton5.Checked Then
        age = "Above 40. All Right "
      End If
      MessageBox.Show("Name : " + TextBox1.Text + " Age : " + age)
```

```vb
        End If
    End Sub


    Private Sub RadioButton3_CheckedChanged(sender As Object, e As EventArgs) Handles
RadioButton3.CheckedChanged

        If RadioButton3.Checked Then

            CheckBox2.Checked = True

        Else

            CheckBox2.Checked = False

        End If
    End Sub


    Private Sub RadioButton4_CheckedChanged(sender As Object, e As EventArgs) Handles
RadioButton4.CheckedChanged

        If RadioButton4.Checked Then

            CheckBox1.Checked = True

        Else

            CheckBox1.Checked = False

        End If
    End Sub


    Private Sub RadioButton5_CheckedChanged(sender As Object, e As EventArgs) Handles
RadioButton5.CheckedChanged

        If RadioButton5.Checked Then

            CheckBox3.Checked = True

        Else

            CheckBox3.Checked = False

        End If
```

End Sub

End Class

Output: -

Q14. Write a Vb.net program to design the following form, select the question number from combo box that question will be displayed into textbox and the options for that question will be displayed on four radio buttons, select option and click on submit button result should be displayed in another textbox.

Public Class Q14

   Private Sub ComboBox1_SelectedIndexChanged(sender As Object, e As EventArgs) Handles ComboBox1.SelectedIndexChanged

      If ComboBox1.SelectedItem() = "Question 1" Then

         RichTextBox1.Text = "What is Capital Of India ?"

         RadioButton1.Text = "Delhi"

         RadioButton2.Text = "Pune"

         RadioButton3.Text = "Mumbai"

         RadioButton4.Text = "Chennai"

      End If

      If ComboBox1.SelectedItem() = "Question 2" Then

         RichTextBox1.Text = "What is Capital Of Maharashtra ?"

         RadioButton1.Text = "Pune"

         RadioButton2.Text = "Nagpur"

         RadioButton3.Text = "Mumbai"

         RadioButton4.Text = "Nagar"

      End If

```vbnet
    End Sub

Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim correct As String
    Dim wrong As String
    correct = "Answer is correct"
    wrong = "Answer is wrong"
    If ComboBox1.SelectedItem() = "Question 1" Then
        If RadioButton1.Checked Then
            TextBox1.Text = correct
        ElseIf RadioButton2.Checked Then
            TextBox1.Text = wrong
        ElseIf RadioButton3.Checked Then
            TextBox1.Text = wrong
        ElseIf RadioButton4.Checked Then
            TextBox1.Text = wrong
        End If
    End If
    If ComboBox1.SelectedItem() = "Question 2" Then
        If RadioButton1.Checked Then
            TextBox1.Text = wrong
        ElseIf RadioButton2.Checked Then
            TextBox1.Text = wrong
        ElseIf RadioButton3.Checked Then
            TextBox1.Text = correct
        ElseIf RadioButton4.Checked Then
            TextBox1.Text = wrong
```
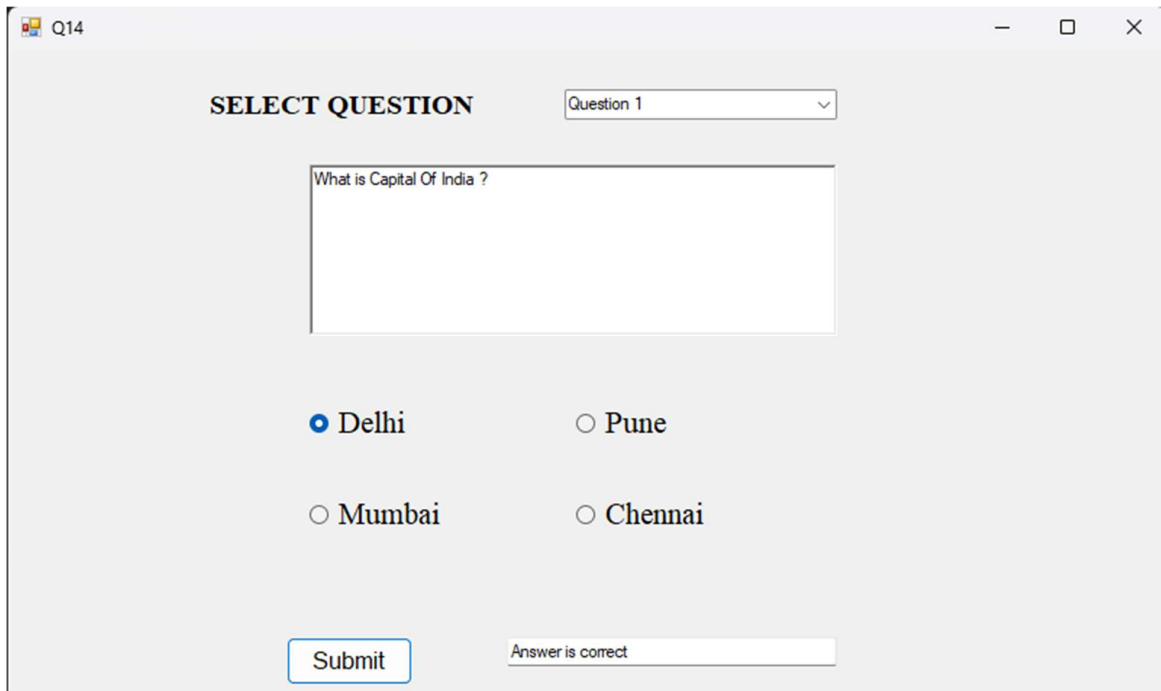
```
        End If

    End If

  End Sub

End Class
```

Output: -

Q15. Write a Vb.net program to generate Sample TreeView control shown in following form:
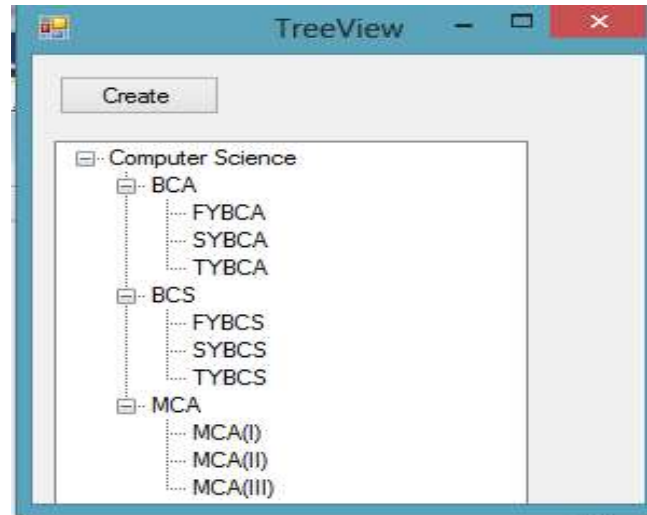
Public Class Q15

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

    TreeView2.Nodes.Add("Computer Science")

    TreeView2.Nodes(0).Nodes.Add("BCA")

    TreeView2.Nodes(0).Nodes(0).Nodes.Add("FYBCA")

    TreeView2.Nodes(0).Nodes(0).Nodes.Add("SYBCA")

    TreeView2.Nodes(0).Nodes(0).Nodes.Add("TYBCA")

    TreeView2.Nodes(0).Nodes.Add("BSC")

    TreeView2.Nodes(0).Nodes(1).Nodes.Add("FYBSC")

    TreeView2.Nodes(0).Nodes(1).Nodes.Add("SYBSC")

    TreeView2.Nodes(0).Nodes(1).Nodes.Add("TYBSC")

    TreeView2.Nodes(0).Nodes.Add("MCA")

    TreeView2.Nodes(0).Nodes(2).Nodes.Add("MCA(I)")

    TreeView2.Nodes(0).Nodes(2).Nodes.Add("MCA(II)")

    TreeView2.Nodes(0).Nodes(2).Nodes.Add("MCA(III)")

End Sub

End Class
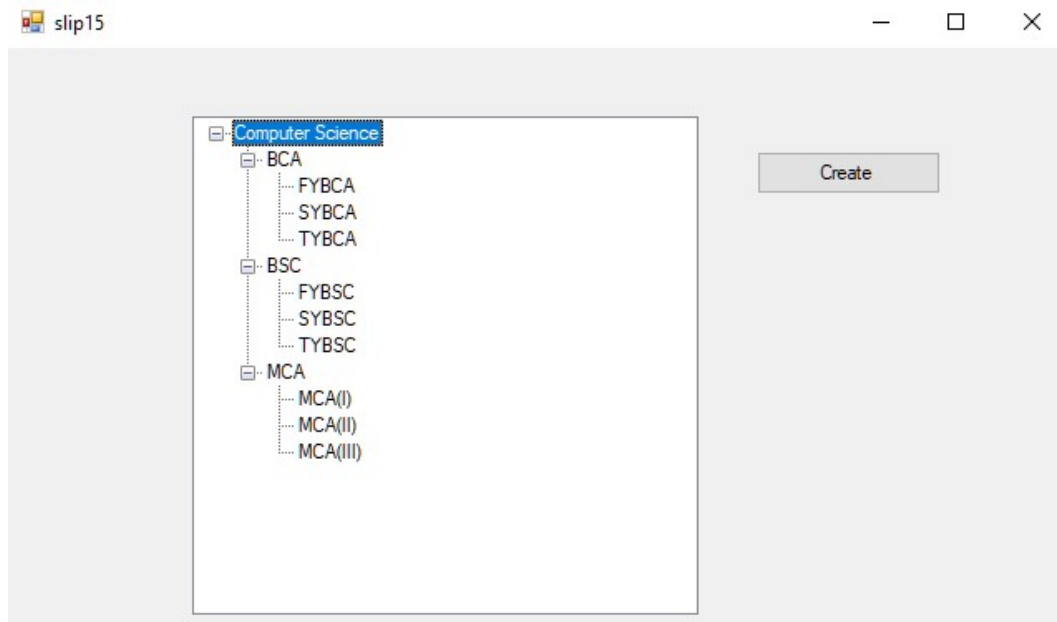
Q16. Write a Vb.net program to design the following form, it contains the three menus Color (Red,Blue,Green) ,Window(Maximize, Minimize, Restore) and Exit. On Selection of any menu or submenu result should affect the form control(for example if user selected Red color from Color menu back color of form should get changed to Red and if user selected Maximize from Window Menu then form should get maximized).
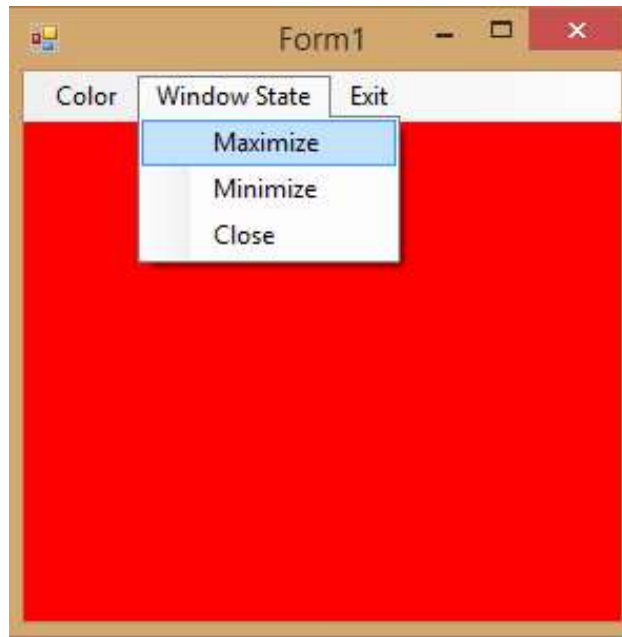

```vbnet
Public Class Q16

    Private Sub RedToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles RedToolStripMenuItem.Click

        Me.BackColor = Color.Red

    End Sub


    Private Sub BlueToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles BlueToolStripMenuItem.Click

        Me.BackColor = Color.Blue

    End Sub


    Private Sub GreenToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles GreenToolStripMenuItem.Click

        Me.BackColor = Color.Green
```

```vbnet
    End Sub


    Private Sub MaximizeToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles MaximizeToolStripMenuItem.Click

        Me.WindowState = FormWindowState.Maximized

    End Sub


    Private Sub MinimizeToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles MinimizeToolStripMenuItem.Click

        Me.WindowState = FormWindowState.Minimized

    End Sub


    Private Sub RestoreToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles RestoreToolStripMenuItem.Click

        Me.WindowState = FormWindowState.Normal

    End Sub


    Private Sub ExitToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
ExitToolStripMenuItem.Click

        Me.Close()

    End Sub
End Class
```

Q17. Write a Vb.net program to design the following form, this program shows the details of students in the form of form (use split container or Groupbox control to separate the input and output session). [Marks 20]

Public Class Q17

Private Sub Q17_Load(sender As Object, e As EventArgs) Handles MyBase.Load

    Panel2.Hide()

  End Sub

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

    Panel2.Show()

    Label12.Text = TextBox1.Text

    Label13.Text = TextBox2.Text

    Label14.Text = TextBox3.Text

    Label15.Text = ComboBox1.SelectedItem()

    If RadioButton1.Checked = True Then

        Label16.Text = RadioButton1.Text

    ElseIf RadioButton2.Checked = True Then

```vbnet
            Label16.Text = RadioButton2.Text

        End If


        Label17.Text = DateTimePicker1.Value

        Label18.Text = TextBox4.Text

        Label19.Text = TextBox5.Text

    End Sub

End Class
```

Q18. Write a Vb.net program to design the following form, accept all details from user and display the details through message box.

Public Class Form1

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

    Dim a, b, c As String

    c = TextBox1.Text

    If CheckBox1.Checked = True And CheckBox2.Checked = True Then

      a = CheckBox1.Text

      a = CheckBox2.Text

    ElseIf CheckBox2.Checked = True Then

      a = CheckBox2.Text

    ElseIf CheckBox3.Checked = True Then

      a = CheckBox3.Text

    ElseIf CheckBox4.Checked = True Then

      a = CheckBox4.Text

    End If

    If RadioButton1.Checked = True Then

      b = RadioButton1.Text

    ElseIf RadioButton2.Checked = True Then

      b = RadioButton2.Text

    ElseIf RadioButton3.Checked = True Then

```vb
            b = RadioButton3.Text
        ElseIf RadioButton4.Checked = True Then
            b = RadioButton4.Text
        End If
        MessageBox.Show("Name: " + c + " Post: " + b + " Qualification: " + a)
    End Sub
End Class
```

Q19. Develop the menu based Vb.net application to implement a text editor with cut, copy, paste, save, close operations.
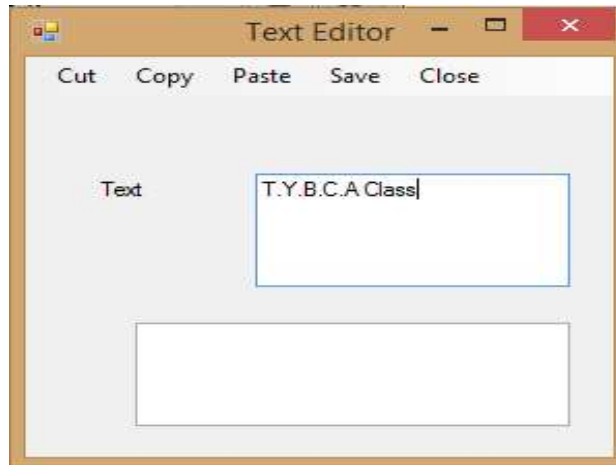

```vbnet
Public Class Q19

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

        Dim path As String

        If DialogResult.OK = SaveFileDialog1.ShowDialog() Then

            path = SaveFileDialog1.FileName

            RichTextBox1.SaveFile(path, RichTextBoxStreamType.PlainText)

            MsgBox("File saved successfully")

        End If

    End Sub


    Private Sub CutToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles CutToolStripMenuItem.Click

        RichTextBox1.Cut()

    End Sub


    Private Sub CopyToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles CopyToolStripMenuItem.Click

        RichTextBox1.Copy()
```

```vb
    End Sub


    Private Sub PasteToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
PasteToolStripMenuItem.Click

        RichTextBox2.Paste()

    End Sub



    Private Sub CloseToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
CloseToolStripMenuItem.Click

        Me.Close()

    End Sub
End Class
```

Q20. Write a VB.NET program to do the following operations on RichTextBox values

     i) Font Style

     ii) Font Color

     iii) Save

     iv) Open


```
Public Class Q20

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

        FontDialog1.ShowDialog()

        RichTextBox1.Font = FontDialog1.Font

    End Sub

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

        ColorDialog1.ShowDialog()

        RichTextBox1.ForeColor = ColorDialog1.Color

    End Sub
```

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

    Dim path As String

    If DialogResult.OK = SaveFileDialog1.ShowDialog() Then

        path = SaveFileDialog1.FileName

        RichTextBox1.SaveFile(path, RichTextBoxStreamType.PlainText)

        MsgBox("File saved successfully")

    End If


End Sub


Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click

    Dim path As String

    If DialogResult.OK = OpenFileDialog1.ShowDialog() Then

        path = OpenFileDialog1.FileName

        RichTextBox1.LoadFile(path, RichTextBoxStreamType.PlainText)

        MsgBox("File Open successfully.........")

    End If
End Sub


Private Sub FontStyleToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles FontStyleToolStripMenuItem.Click

End Sub


Private Sub StyleToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
StyleToolStripMenuItem.Click

    FontDialog1.ShowDialog()

    RichTextBox1.Font = FontDialog1.Font
```
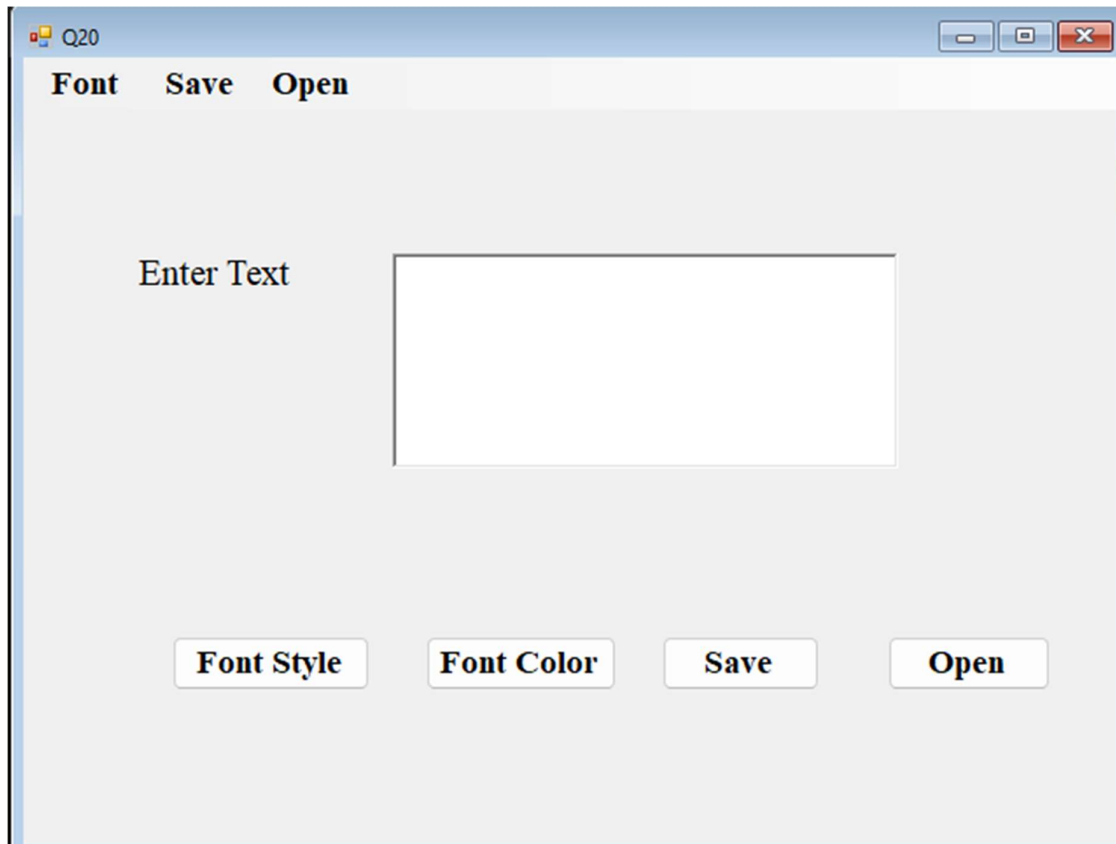
```
    End Sub


    Private Sub ColorToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
ColorToolStripMenuItem.Click

        ColorDialog1.ShowDialog()

        RichTextBox1.ForeColor = ColorDialog1.Color

    End Sub


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

        Dim path As String

        If DialogResult.OK = SaveFileDialog1.ShowDialog() Then

            path = SaveFileDialog1.FileName

            RichTextBox1.SaveFile(path, RichTextBoxStreamType.PlainText)

            MsgBox("File saved successfully")

        End If

    End Sub


    Private Sub OpToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
OpToolStripMenuItem.Click

        Dim path As String

        If DialogResult.OK = OpenFileDialog1.ShowDialog() Then

            path = OpenFileDialog1.FileName

            RichTextBox1.LoadFile(path, RichTextBoxStreamType.PlainText)

            MsgBox("File Open successfully.........")

        End If

    End Sub
End Class
```

Q21. Create a project to design a calculator using control array
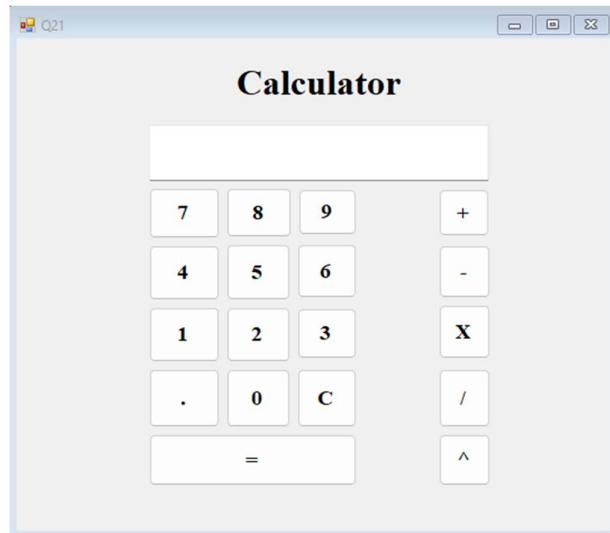

```vb
Public Class Q21

    Dim a As Double

    Dim b As Double

    Dim c As Double

    Dim op As Char

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

        If TextBox1.Text = "0" Then

            TextBox1.Text = "7"

        Else

            TextBox1.Text += "7"

        End If

    End Sub


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

        If TextBox1.Text = "0" Then

            TextBox1.Text = "8"

        Else
```

```vb
        TextBox1.Text += "8"

      End If

  End Sub


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

    If TextBox1.Text = "0" Then

        TextBox1.Text = "9"

    Else

        TextBox1.Text += "9"

    End If

  End Sub


  Private Sub Button6_Click(sender As Object, e As EventArgs) Handles Button6.Click

    If TextBox1.Text = "0" Then

        TextBox1.Text = "4"

    Else

        TextBox1.Text += "4"

    End If

  End Sub


  Private Sub Button5_Click(sender As Object, e As EventArgs) Handles Button5.Click

    If TextBox1.Text = "0" Then

        TextBox1.Text = "5"

    Else

        TextBox1.Text += "5"

    End If

  End Sub
```

```vbnet
Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click

    If TextBox1.Text = "0" Then

        TextBox1.Text = "6"

    Else

        TextBox1.Text += "6"

    End If

End Sub


Private Sub Button9_Click(sender As Object, e As EventArgs) Handles Button9.Click

    If TextBox1.Text = "0" Then

        TextBox1.Text = "1"

    Else

        TextBox1.Text += "1"

    End If

End Sub


Private Sub Button8_Click(sender As Object, e As EventArgs) Handles Button8.Click

    If TextBox1.Text = "0" Then

        TextBox1.Text = "2"

    Else

        TextBox1.Text += "2"

    End If

End Sub


Private Sub Button7_Click(sender As Object, e As EventArgs) Handles Button7.Click

    If TextBox1.Text = "0" Then
```

```vb
        TextBox1.Text = "3"

    Else

        TextBox1.Text += "3"

    End If

End Sub


Private Sub Button11_Click(sender As Object, e As EventArgs) Handles Button11.Click

    If TextBox1.Text = "0" Then

        TextBox1.Text = "0"

    Else

        TextBox1.Text += "0"

    End If

End Sub


Private Sub Button12_Click(sender As Object, e As EventArgs) Handles Button12.Click

    If TextBox1.Text = "0" Then

        TextBox1.Text = ""

    Else

        TextBox1.Text += "."

    End If

End Sub


Private Sub Button16_Click(sender As Object, e As EventArgs) Handles Button16.Click

    a = Val(TextBox1.Text)

    op = "+"

    TextBox1.Text = ""

End Sub
```

```vb
Private Sub Button15_Click(sender As Object, e As EventArgs) Handles Button15.Click

    a = Val(TextBox1.Text)

    op = "-"

    TextBox1.Text = ""

End Sub


Private Sub Button14_Click(sender As Object, e As EventArgs) Handles Button14.Click

    a = Val(TextBox1.Text)

    op = "*"

    TextBox1.Text = ""

End Sub


Private Sub Button13_Click(sender As Object, e As EventArgs) Handles Button13.Click

    a = Val(TextBox1.Text)

    op = "/"

    TextBox1.Text = ""

End Sub


Private Sub Button18_Click(sender As Object, e As EventArgs) Handles Button18.Click

    a = Val(TextBox1.Text)

    op = "^"

    TextBox1.Text = ""

End Sub


Private Sub Button17_Click(sender As Object, e As EventArgs) Handles Button17.Click

    TextBox1.Clear()
```

```vb
    End Sub


    Private Sub Button10_Click(sender As Object, e As EventArgs) Handles Button10.Click
        b = Val(TextBox1.Text)
        If (op = "+") Then
            TextBox1.Text = a + b
        ElseIf op = "^" Then
            TextBox1.Text = a ^ b
        ElseIf op = "-" Then
            TextBox1.Text = a - b
        ElseIf op = "*" Then
            TextBox1.Text = a * b
        ElseIf op = "/" And b = 0 Then
            TextBox1.Text = "Syntax Error"
        ElseIf op = "/" Then
            TextBox1.Text = a / b
        End If
    End Sub
End Class
```
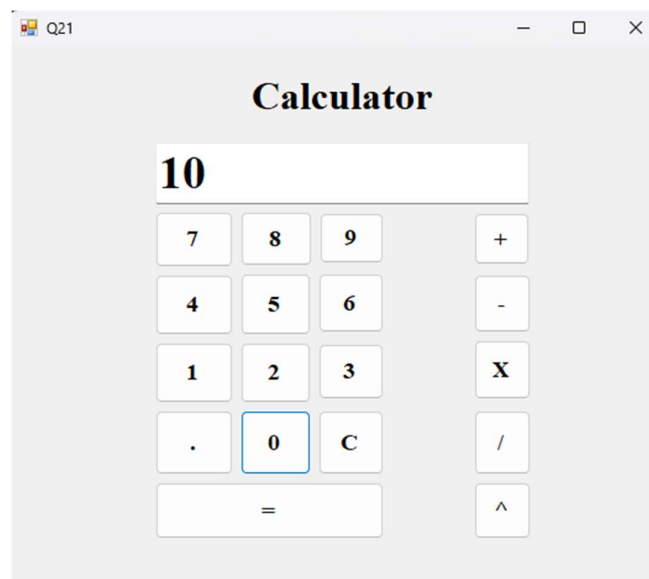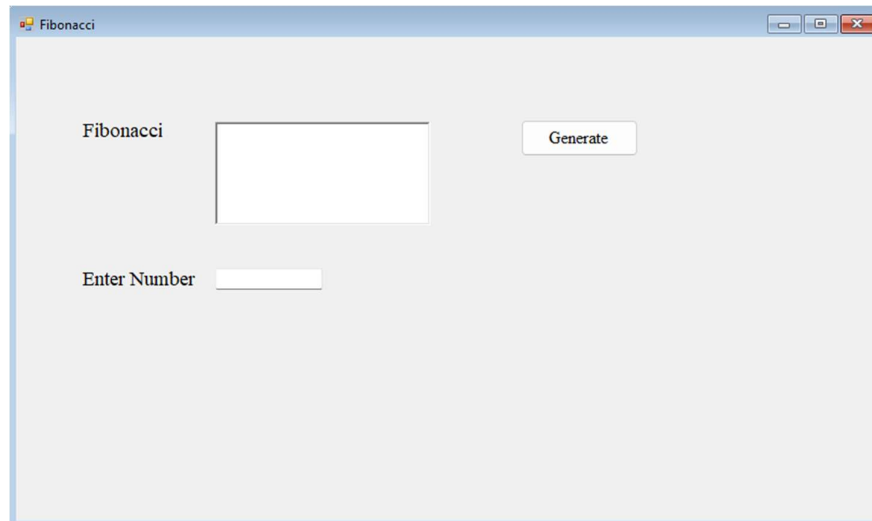
Q22 Write a program, using recursive function to generate Fibonacci Series.


```vb
Public Class Q22

    Function fib(ByVal n As Integer) As Integer

        If (n = 0 Or n = 1) Then

            Return n

        Else

            Return fib(n - 1) + fib(n - 2)

        End If

    End Function


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

        Dim n As Integer = TextBox1.Text

        While (n >= 0)

            Dim s As String = fib(n)

            RichTextBox1.Text += s + " "

            n -= 1

        End While

    End Sub

End Class
```
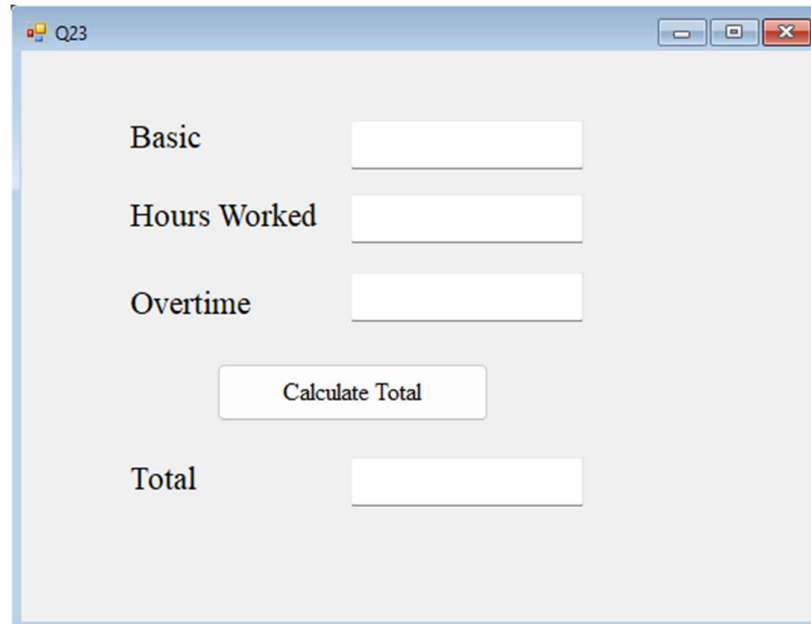
Fibonacci

Fibonacci

5 3 2 1 1 0

Generate

Enter Number 5

Q.23 Write a program to calculate pay that takes two parameters hours and wages and display the total pay of an employee.

Public Class Q23

    Dim hour, basic, overtime As Integer

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

        hour = Val(TextBox2.Text)
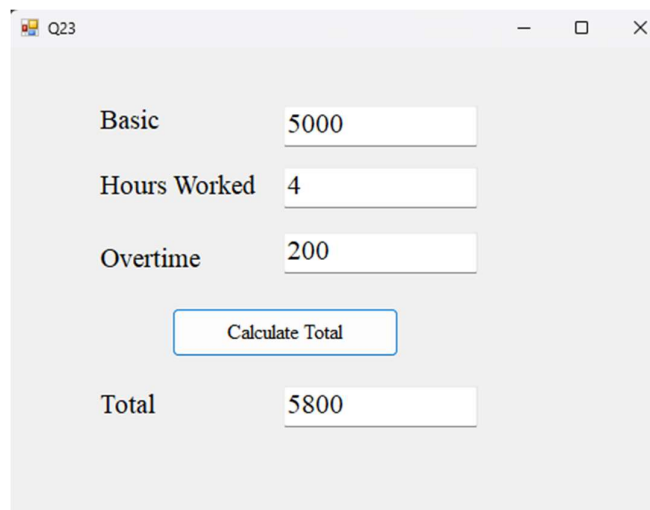
        basic = Val(TextBox1.Text)

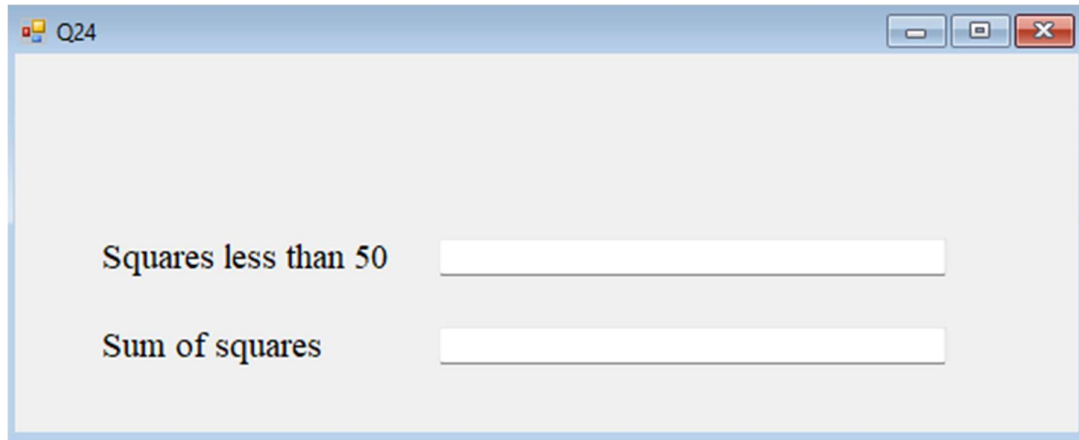   overtime = Val(TextBox3.Text)

        TextBox4.Text = basic + hour * overtime

    End Sub

End Class

Q24 Write a program to print first n square less than 50 and print the sum of the all the square of the n number

Public Class Q24

   Private Sub Q24_Load(sender As Object, e As EventArgs) Handles MyBase.Load

     Dim n As Integer = 1

     Dim sum As Integer = 0

     Dim x As String

     While n * n < 50
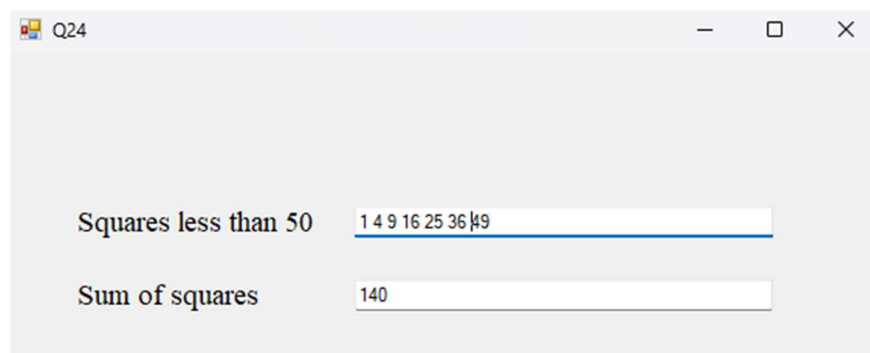
       x = n * n

       sum += n * n

       n += 1

       TextBox1.Text += x + ""

     End While

     TextBox2.Text = sum

   End Sub

End Class

Q25 Create a project for book sales. Make text boxes for quantity, title and price with labels. Calculate total price, discount (15%) and discounted price.

Public Class Q25

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

        Dim price As Integer = Val(TextBox1.Text) * Val(TextBox3.Text)
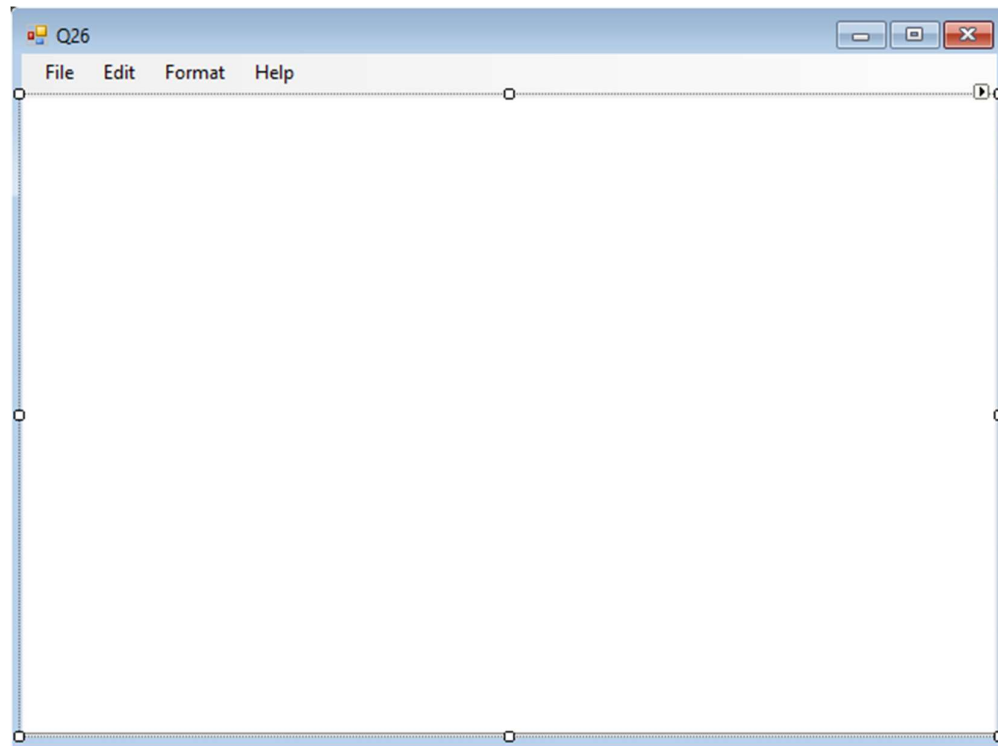
        TextBox4.Text = price

        TextBox5.Text = price - (0.15 * price)

    End Sub

End Class

Q26 Create a text editor application. It should perform operation like cut, copy, paste and change in font, color of the selected text. Also implement new open and save-file menu option. Write a program to implement the concept of function overloading.

Public Class Q26

　　Private Sub NewToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles NewToolStripMenuItem.Click

　　　　MsgBox("Do you want to save changes...", MsgBoxStyle.YesNoCancel)

　　　　TextBox1.Text = " "

　　End Sub

　　Private Sub OpenToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles OpenToolStripMenuItem.Click

　　　　If OpenFileDialog1.ShowDialog = Windows.Forms.DialogResult.OK Then

　　　　　　TextBox1.Text =
My.Computer.FileSystem.ReadAllText(OpenFileDialog1.FileName)

　　　　End If

　　End Sub

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

        If SaveFileDialog1.ShowDialog = Windows.Forms.DialogResult.OK Then

            My.Computer.FileSystem.WriteAllText(SaveFileDialog1.FileName, TextBox1.Text,
False)

        End If

    End Sub


    Private Sub PrintToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
PrintToolStripMenuItem.Click

        PrintDialog1.ShowDialog()

    End Sub


    Private Sub ExitToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
ExitToolStripMenuItem.Click

        Me.Close()

    End Sub


    Private Sub UndoToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
UndoToolStripMenuItem.Click

        TextBox1.Undo()

    End Sub


    Private Sub CopyToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
CopyToolStripMenuItem.Click

        TextBox1.Copy()

    End Sub
```

```vbnet
    Private Sub CutToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
CutToolStripMenuItem.Click

        TextBox1.Cut()

    End Sub


    Private Sub PasteToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
PasteToolStripMenuItem.Click

        TextBox1.Paste()

    End Sub


    Private Sub SelectAllToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles SelectAllToolStripMenuItem.Click

        TextBox1.SelectAll()

    End Sub


    Private Sub FontToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
FontToolStripMenuItem.Click

        If FontDialog1.ShowDialog = Windows.Forms.DialogResult.OK Then

            TextBox1.Font = FontDialog1.Font

        End If

    End Sub


    Private Sub ColorToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
ColorToolStripMenuItem.Click

        If ColorDialog1.ShowDialog = Windows.Forms.DialogResult.OK Then

            TextBox1.ForeColor = ColorDialog1.Color

        End If

    End Sub
```

```vbnet
    Private Sub AboutToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
AboutToolStripMenuItem.Click

    MsgBox("Notepad developed by" & vbCrLf & "Tejas R Shinde")

    End Sub

End Class
```
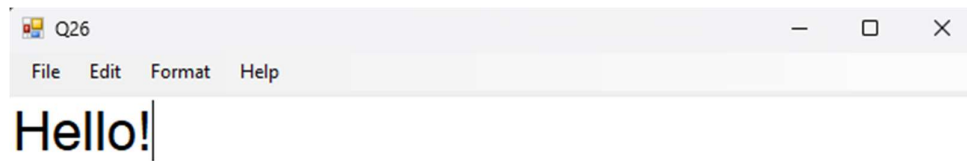
Q27 Using exception handling write a program to divide two numbers

Module Module1

  Sub Division(ByVal num1 As Integer, ByVal num2 As Integer)

    Dim result As Integer

    Try

      result = num1 \ num2

    Catch e As DivideByZeroException

      Console.WriteLine("Exception caught:{0}", e)

    Finally

      Console.WriteLine("Result: {0}", result)

    End Try

  End Sub
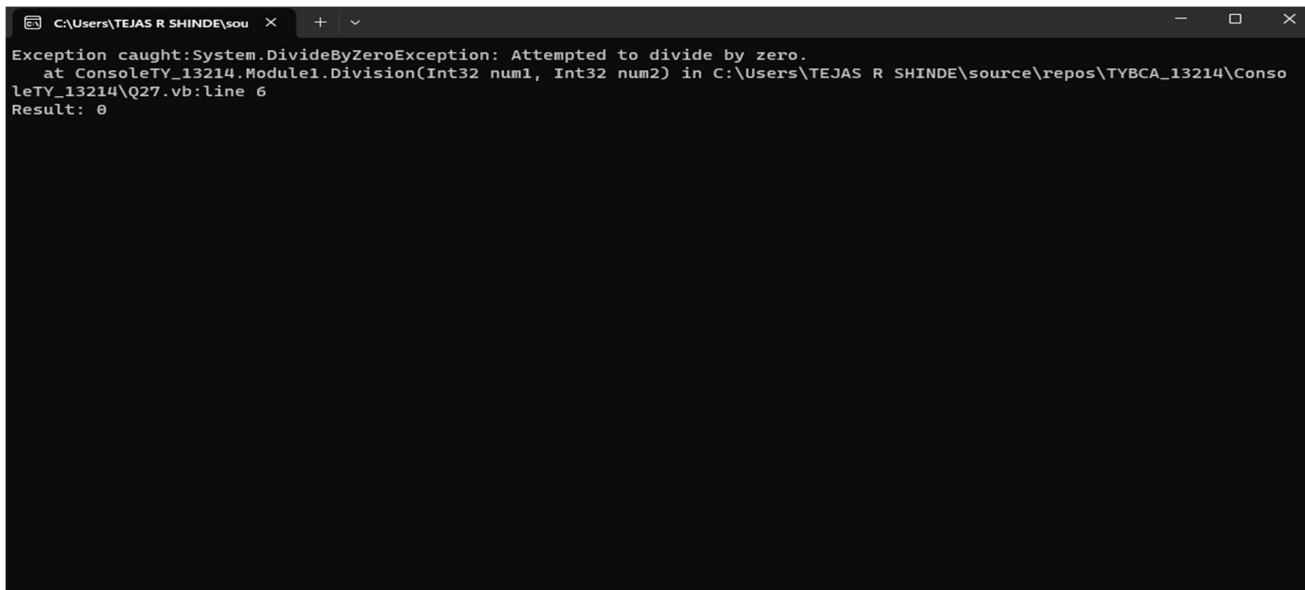
  Sub Main()

    Division(25, 0)

    Console.ReadKey()

  End Sub

End Module

```
Exception caught:System.DivideByZeroException: Attempted to divide by zero.
   at ConsoleTY_13214.Module1.Division(Int32 num1, Int32 num2) in C:\Users\TEJAS R SHINDE\source\repos\TYBCA_13214\Conso
leTY_13214\Q27.vb:line 6
Result: 0
```

Q28 Currency Conversion

Public Class Q28

   Dim x, y, z As Double

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

      If ComboBox1.Text = "POUND" And ComboBox2.Text = "USD" Then

         x = TextBox1.Text

         y = x * 90

         z = y / 70

         Label2.Text = z

      ElseIf ComboBox1.Text = "POUND" And ComboBox2.Text = "INR" Then

         Label2.Text = Nothing

         x = TextBox1.Text

         y = x * 90

         Label2.Text = y

      ElseIf ComboBox1.Text = "USD" And ComboBox2.Text = "INR" Then

         Label2.Text = Nothing

         x = TextBox1.Text

```
            y = x * 70

            Label2.Text = y

        ElseIf ComboBox1.Text = "USD" And ComboBox2.Text = "GBP" Then

            Label2.Text = Nothing

            x = TextBox1.Text

            y = x * 70

            z = y / 90

            Label2.Text = z

        ElseIf ComboBox1.Text = "INR" And ComboBox2.Text = "USD" Then

            Label2.Text = Nothing

            x = TextBox1.Text

            y = x / 70

            Label2.Text = y

        ElseIf ComboBox1.Text = "INR" And ComboBox2.Text = "GBP" Then

            Label2.Text = Nothing

            x = TextBox1.Text

            y = x / 90

            Label2.Text = y

        Else

            Label2.Text = Nothing

            x = TextBox1.Text

            Label2.Text = x

        End If

    End Sub

End Class
```

CURRENCY CONVERTER

USD ⌄   To   INR ⌄

100   7000

CONVERT

Q29. Write a VB.NET program to create a table Patient (Pid, PName, Contact_No, Disease). Insert records into table and display appropriate message in message box. (Use MS Access to create db)

Q30. Write a VB.NET program to create a table Employee (Eid, EName, Designation, doj). Insert records into table and display it in GridView. (Use SQLServer to create db)


```vbnet
Imports System.Data.SqlClient

Public Class Q30

    Private connection As SqlConnection

    Private command As SqlCommand

    Private adapter As SqlDataAdapter

    Private str As String

    Private ds As New DataSet


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

        connection = New SqlConnection("Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\TEJAS R
SHINDE\source\repos\TYBCA_13214\TYBCA_13214\Employee.mdf;Integrated
Security=True")

        connection.Open()

        str = New String("Insert into Employee values(" & CInt(TextBox1.Text) & ",'" &
TextBox2.Text & "','" & TextBox3.Text & "','" & TextBox4.Text & "')")

        command = New SqlCommand(str, connection)

        command.ExecuteNonQuery()
```

```vb
    MsgBox("Record inserted")

    connection.Close()

  End Sub


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

    connection = New SqlConnection("Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\TEJAS R
SHINDE\source\repos\TYBCA_13214\TYBCA_13214\Employee.mdf;Integrated
Security=True")

    connection.Open()

    str = "select * from Employee"

    adapter = New SqlDataAdapter(str, connection)

    adapter.Fill(ds, "Employee")

    DataGridView1.DataSource = ds

    DataGridView1.DataMember = "Employee"

    connection.Close()

  End Sub
End Class
```

Q31. Write a VB.NET program to create a table student (RollNo ,SName, Class). Insert the records (Max: 5). Update class of students to 'TYBCA' whose class is 'SYBCA' and display updated records in   GridView. (Use MS Access to create db)

Q32. Write a VB.NET program to create teacher table (Tid , TName, subject). Insert the records (Max : 5). Search record of a teacher who teaches "VB.NET" subject and display result in GridView. (Use SQL to create db).

Q33. Write a VB.NET program to create movie table (Mv_Name, Release_year, Director). Insert the records(Max: 5). Delete the records of movies whose release year is 2015 and display appropriate message in messagebox.(Use MS Access to create db)

Q34. Write a VB.NET program to accept the details of customer (CName, Contact_No, Email_id). Store it into the database with proper validation and display appropriate message by using Messagebox.(Use MS Access)

Q35. Write a VB.NET program to accept the details of product (pid, pname, expiry_date, price). Store it into the database and display it on the Crystal Report.(Use SQL Server)

Q36. Write a VB.NET program to accept the details Supplier (SupId, SupName, Phone_No, Address) store it into the database and display it. (Use Crystal Report)

Q37. Write a VB.NET program to create Author table (aid , aname , book_name). Insert the records (Max 5). Delete a record of author who has written "VB.NET book" and display remaining records on the Crystal Report. (Use MS Access to create db)

Q38. Write a VB.NET program to create player table (Pid,PName,Game, no_of_matches). Insert records and update number of matches of 'Sachin Tendulkar' and display result in Crystal Report. (Use SQL to create db)