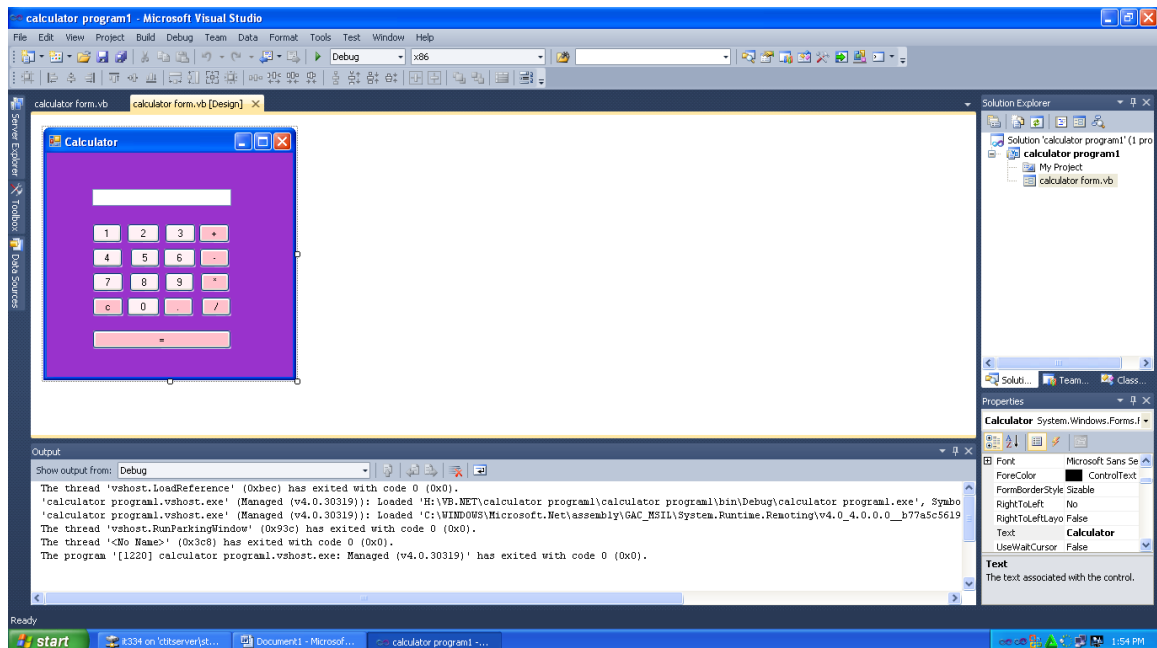1. Write a program to design an Arithmetic Calculator using Buttons and Textbox.

Form Design

CODING

Public Class Calculator

    Dim firstnum As Decimal

    Dim secondnum As Decimal

    Dim Operation As Integer

    Dim Operator_Selector As Boolean = False

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

    If TextBox1.Text <> "0" Then

      TextBox1.Text += "2"

    Else : TextBox1.Text = "2"

    End If

    End Sub

Private Sub Button15_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button15.Click

```vbnet
        TextBox1.Text = "0"

    End Sub

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

        Firstnum = TextBox1.Text

        TextBox1.Text = " "

        Operator_Selector = True

        Operation = 1 '=+
    End Sub

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

        If TextBox1.Text <> "0" Then

            TextBox1.Text += "1"

        Else : TextBox1.Text = "1"

        End If

    End Sub

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

        If TextBox1.Text <> "0" Then

            TextBox1.Text += "4"

        Else : TextBox1.Text = "4"

        End If

    End Sub

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

        Firstnum = TextBox1.Text

        TextBox1.Text = ""

        Operator_Selector = True

        Operation = 2 '=-
    End Sub

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

        If TextBox1.Text <> "0" Then
```

```vb
        TextBox1.Text += "3"

    Else : TextBox1.Text = "3"

    End If

  End Sub

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

    If TextBox1.Text <> "0" Then

      TextBox1.Text += "5"

    Else : TextBox1.Text = "5"

    End If

  End Sub

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

    If TextBox1.Text <> "0" Then

      TextBox1.Text += "6"

    Else : TextBox1.Text = "6"

    End If

  End Sub

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

    If TextBox1.Text <> "0" Then

      TextBox1.Text += "7"

    Else : TextBox1.Text = "7"

    End If

  End Sub

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

    If TextBox1.Text <> "0" Then

      TextBox1.Text += "8"

    Else : TextBox1.Text = "8"

    End If

  End Sub
```

```vb
    Private Sub Button9_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button9.Click

        If TextBox1.Text <> "0" Then

            TextBox1.Text += "9"

        Else : TextBox1.Text = "9"

        End If

    End Sub

    Private Sub Button0_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button10.Click

        If TextBox1.Text <> "0" Then

            TextBox1.Text += "0"

        Else : TextBox1.Text = "0"

        End If

    End Sub

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

        If Not (TextBox1.Text.Contains(".")) Then

            TextBox1.Text += "."

        End If

    End Sub

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

        If Operator_Selector = True Then

            Secondnum = TextBox1.Text

            If Operation = 1 Then

                TextBox1.Text = firstnum + secondnum

            ElseIf Operation = 2 Then

                TextBox1.Text = firstnum - secondnum

            ElseIf Operation = 3 Then

                TextBox1.Text = firstnum * secondnum

            Else

                If secondnum = 0 Then
```

```vb
                TextBox1.Text = "ERROR...."

            Else

                TextBox1.Text = firstnum / secondnum

            End If

        End If

        OPerator_Selector = vbFalse

    End If

End Sub

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

    Firstnum = TextBox1.Text

    TextBox1.Text = " "

    Operator_Selector = True

    Operation = 4 '=/

End Sub

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

    Firstnum = TextBox1.Text

    TextBox1.Text = " "

    Operator_Selector = True

    Operation = 3 '=*

End Sub

End Class
```
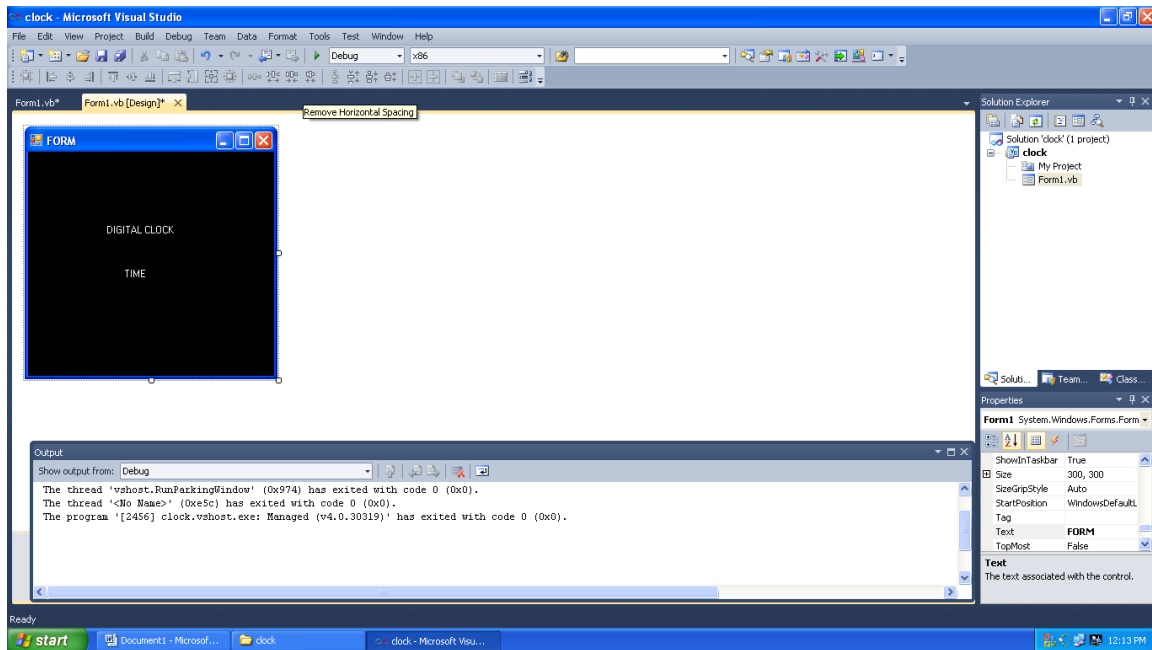
2. Write a program to create Digital Clock using Label and Timer.

FORM DESIGN

CODING

Public Class Form1

   Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

     Timer1.Start()

   End Sub

   Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Timer1.Tick
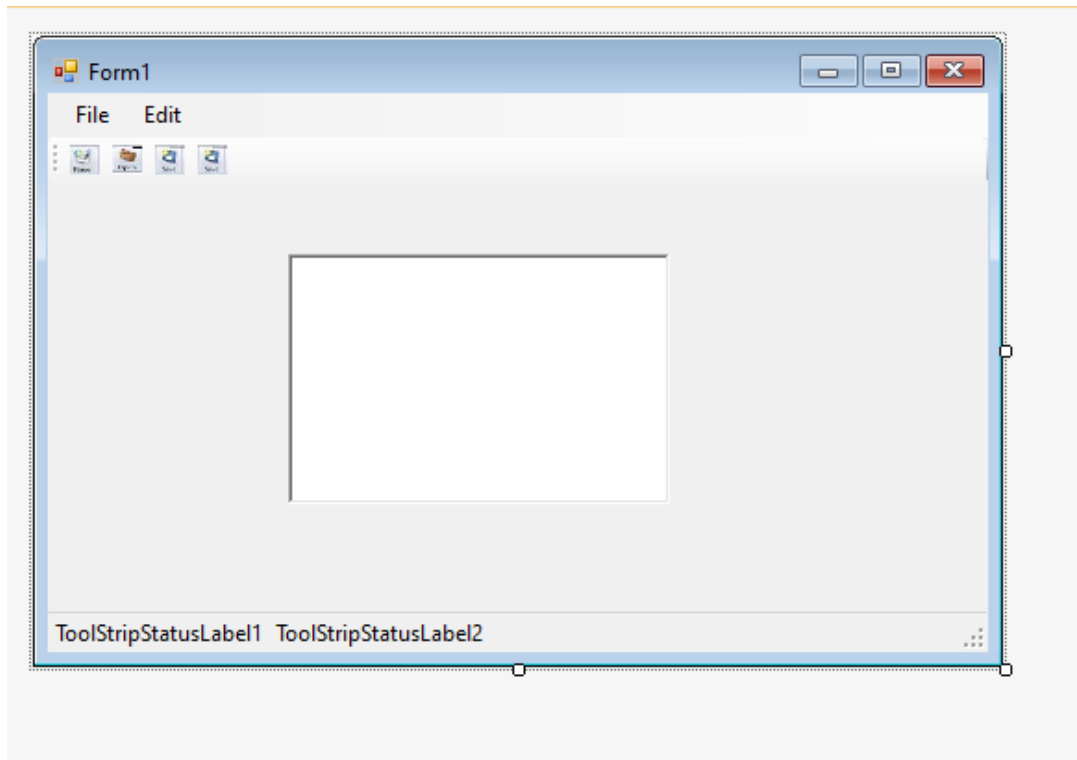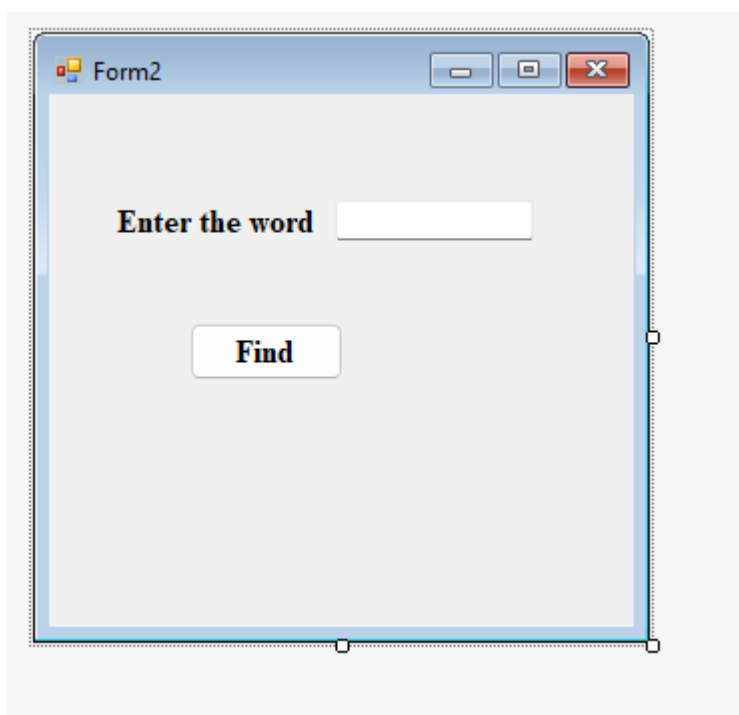
     Label1.Text = DateAndTime.Now

   End Sub

End Class

3. write a program to create Menus, Status Bars and Tool Bars.

FORM DESIGN

FORM 1

FORM 2

FORM1:

```vb
Public Class Form1

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

        MsgBox("New menuitem is selected")

    End Sub

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

        OpenFileDialog1.ShowDialog()

    End Sub

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

        SaveFileDialog1.ShowDialog()

    End Sub

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

        PrintDialog1.ShowDialog()

    End Sub

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

        Close()

    End Sub

    Private Sub FindToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles FindToolStripMenuItem.Click

        Form2.Show()

    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

    Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
MyBase.Load

        ToolStripstatuslabel1.Text = Today

        ToolStripStatusLabel2.Text = TimeOfDay

    End Sub
End Class
```

FORM2:

```
Public Class Form2

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

        Form1.RichTextBox1.Find(TextBox1.Text)

        Me.Close()

    End Sub
End Class
```
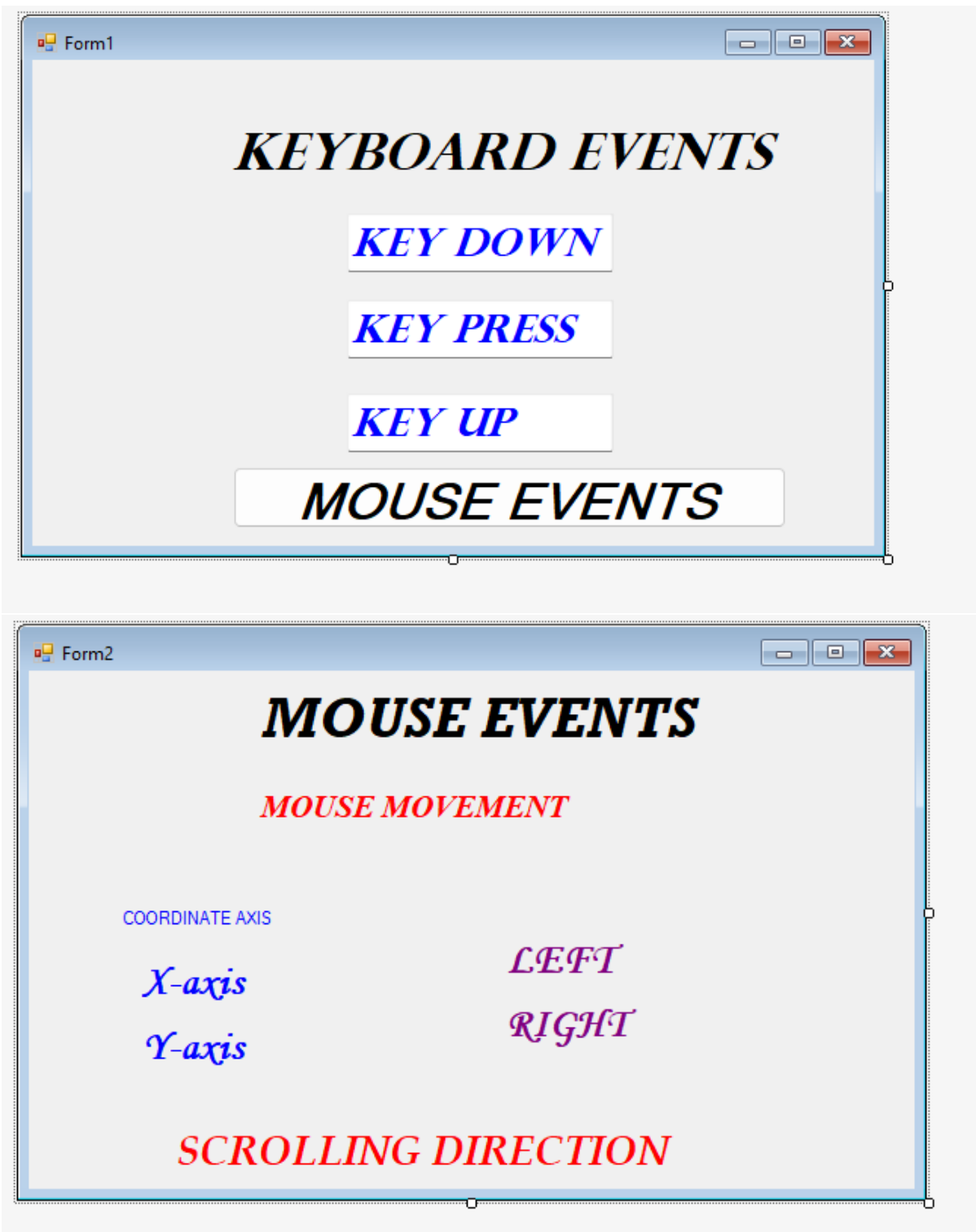
4. Write a program for Keyboard and Mouse events.

FORM1 CODING

```vb
Public Class Form1

    Private Sub TextBox1_KeyDown(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyEventArgs) Handles TextBox1.KeyDown
        If e.KeyCode = Keys.Enter Then
            MsgBox("FOR KEY DOWN-ENTER KEY PRESSED")
        End If
    End Sub

    Private Sub TextBox2_KeyPress(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyPressEventArgs) Handles TextBox2.KeyPress
        If e.KeyChar = Convert.ToChar(13) Then
            MsgBox("FOR KEY PRESS-ENTER KEY PRESSED")
        End If

    End Sub

    Private Sub TextBox3_KeyUp(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyEventArgs) Handles TextBox3.KeyUp
        If e.KeyCode = Keys.Enter Then
            MsgBox("FOR KEY UP-ENTER KEY PRESSE

D")
        End If

    End Sub

    Private Sub TextBox1_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles TextBox1.TextChanged

    End Sub

    Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

    End Sub

    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
        Form2.Show()
    End Sub
End Class




Public Class Form1

    Private Sub TextBox1_KeyDown(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyEventArgs) Handles TextBox1.KeyDown
        If e.KeyCode = Keys.Enter Then
            MsgBox("FOR KEY DOWN-ENTER KEY PRESSED")
        End If
    End Sub

    Private Sub TextBox2_KeyPress(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyPressEventArgs) Handles TextBox2.KeyPress
        If e.KeyChar = Convert.ToChar(13) Then
            MsgBox("FOR KEY PRESS-ENTER KEY PRESSED")
        End If
```

```vbnet
    End Sub

    Private Sub TextBox3_KeyUp(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyEventArgs) Handles TextBox3.KeyUp
        If e.KeyCode = Keys.Enter Then
            MsgBox("FOR KEY UP-ENTER KEY PRESSE

D")
        End If

    End Sub

    Private Sub TextBox1_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles TextBox1.TextChanged

    End Sub

    Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

    End Sub

    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
        Form2.Show()
    End Sub
End Class
```

FORM2 CODING

```vbnet
Public Class Form2


    Private Sub Form2_MouseDown(ByVal sender As Object, ByVal e As
System.Windows.Forms.MouseEventArgs) Handles Me.MouseDown
        If e.Button = MouseButtons.Left Then
            lblleft.Text = "PRESSED"
        ElseIf e.Button = MouseButtons.Right Then
            lblright.Text = "PRESSED"
        End If

    End Sub



    Private Sub Form2_MouseLeave(ByVal sender As Object, ByVal e As System.EventArgs)
Handles Me.MouseLeave
        lblinside.Text = "MOUSE IS NOT INSIDE NOW"
    End Sub

    Private Sub Form2_MouseMove(ByVal sender As Object, ByVal e As
System.Windows.Forms.MouseEventArgs) Handles Me.MouseMove
        lblx.Text = e.X
        lbly.Text = e.Y
    End Sub

    Private Sub Form2_MouseUp(ByVal sender As Object, ByVal e As
System.Windows.Forms.MouseEventArgs) Handles Me.MouseUp
        If e.Button = MouseButtons.Left Then
            lblleft.Text = "UNPRESSED"
        ElseIf e.Button = MouseButtons.Right Then
            lblright.Text = "UNPRESSED"
```

```vb
            End If

    End Sub

    Private Sub lblinside_MouseDown(ByVal sender As Object, ByVal e As
System.Windows.Forms.MouseEventArgs) Handles lblinside.MouseDown
        If e.Button = MouseButtons.Left Then
            lblleft.Text = "PRESSED"
        ElseIf e.Button = MouseButtons.Right Then
            lblright.Text = "PRESSED"
        End If

    End Sub

    Private Sub lblinside_MouseEnter(ByVal sender As Object, ByVal e As
System.EventArgs) Handles lblinside.MouseEnter
        lblinside.Text = "MOUSE IS INSIDE NOW"
    End Sub

    Private Sub lblinside_MouseLeave(ByVal sender As Object, ByVal e As
System.EventArgs) Handles lblinside.MouseLeave
        lblinside.Text = "MOUSE IS NOT INSIDE NOW"
    End Sub

    Private Sub lblinside_MouseUp(ByVal sender As Object, ByVal e As
System.Windows.Forms.MouseEventArgs) Handles lblinside.MouseUp
        If e.Button = MouseButtons.Left Then
            lblleft.Text = "UNPRESSED"
        ElseIf e.Button = MouseButtons.Right Then
            lblright.Text = "UNPRESSED"
        End If

    End Sub

    Private Sub Form2_MouseWheel(ByVal sender As Object, ByVal e As
System.Windows.Forms.MouseEventArgs) Handles Me.MouseWheel
        If e.Delta < 0 Then
            lblscroll.Text = "DOWN DIRECTION"
        End If
        If e.Delta > 0 Then
            lblscroll.Text = "UP DIRECTION"
        End If

    End Sub


    Private Sub Form2_Load(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles MyBase.Load

    End Sub
End Class
```
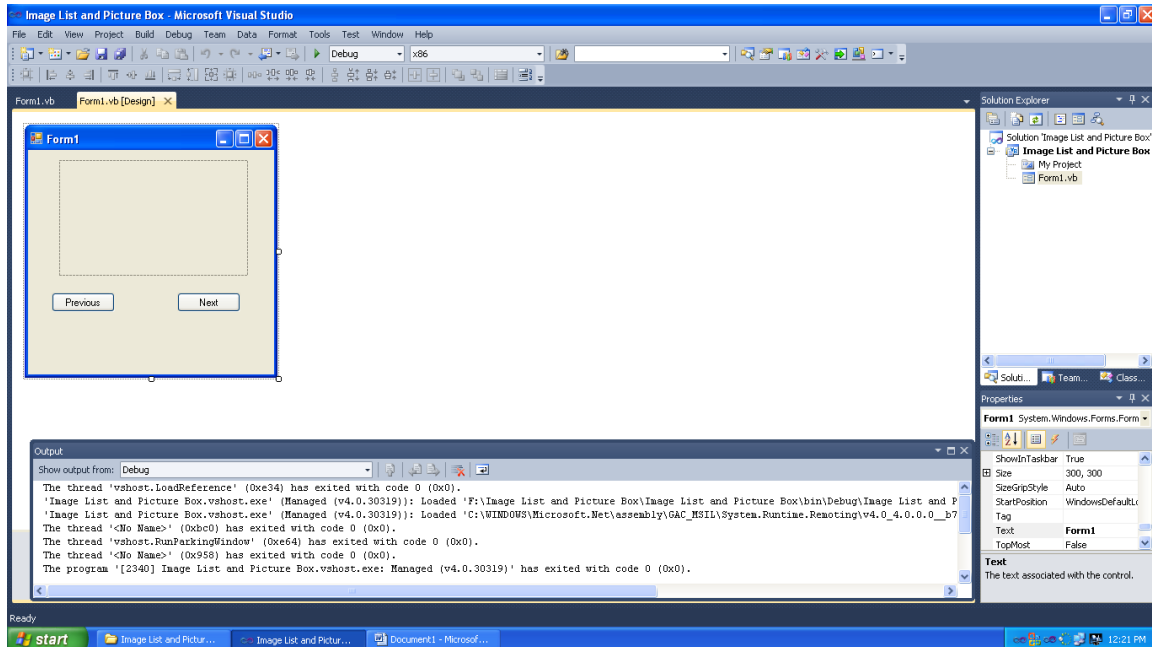
5. Write a program to select image from list box and display it in the picture box.

FORM DESIGN

Public Class Form1

   Dim idx As Integer

   Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

     idx = 0

     displayimage()

   End Sub

   Private Sub displayimage()

     Picscreen.Image = album.Images(idx)

   End Sub

   Private Sub Btnprev_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Btnprev.Click

     idx = idx - 1

     If idx < 0 Then

```vb
            idx = album.Images.Count - 1

        End If

        displayimage()

    End Sub

    Private Sub Btnnext_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
Btnnext.Click

        idx = (idx + 1) Mod album.Images.Count

        displayimage()

    End Sub

End Class
```