VB.NET (Practical)

CCP311 Semester – I

Instruction Hours / week: L:0 T: 0 P : 4 Marks: Internal: 40 External: 60 Total: 100 4H – 2C

End Semester Exam: 3 Hours

COURSE OBJECTIVES:

To make the students

1. To understand use of classes, objects and create programmes by applyingit
2. To understand and write programs VB.Net
3. To Understand the basic approaches to the design of softwareapplications.

COURSEOUTCOMES:

Learners should be able to

1. Implement Object Oriented ProgrammingConcepts
2. Use and create packages and interfaces in a VB.Net
3. Use graphical user interface
4. Exhibit communication skills to communicate the output derived from theprogram.

1. Create a Program for a various font application.
2. Develop a Program for employee details with salary calculation using MDI.
3. Develop a Program for simple calculator.
4. Create a Program using date and time handling functions.
5. Develop a Program using classes and objects.
6. Develop a Program for create and reading text file.
7. Develop a Program for to implement a binary search using collection class.
8. Develop an application to create, save, update, delete and search employee profile in employee database syste (with database connectivity).
9. Develop an application to create inventory management system (with database connectivity).
10. Develop an application to create student mark entry system (with database connectivity).

SUGGESTED READINGS :

1. Jeremy Shapiro (2017), Visual Basic(R).Net: The Complete Reference, 1st edition, Mc Graw Hill, Ne Delhi.
2. ImarSpaanjaars (2014), Beginning ASP.NET 4.5.1 in C# and VB, Wiley, New Delhi.
3. Kogent Learning Solutions Inc. (2013), ASP.NET 4.5, Covers C# and VB Codes, Black Book, DreamtechPress
4. Yashavant P. Kanetkar , Asang Dani (2000), Test Your Vb.Net Skills: Language Elements Part 1 , B Publications, New Delhi.
5. Jason N. Gaylord , Christian Wenz, Pranav Rastogy, Todd Miranda (2013), Professional ASP.NET 4 C# and VB (WROX), Wiley, New Delhi.

Karpagam Academy of Higher Education

(Deemed to be University)

(Established Under section 3 of UGC act 1956)

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Coimbatore-641 021.

DEPARTMENT OF COMMERCE

VB.NET PRACTICAL

II MCOM CA

NAME : _____

REG.NO : _____

Karpagam Academy of Higher Education

(Deemed to be University) (Established Under section 3 of UGC act 1956)

Coimbatore-21

DEPARTMENT OF COMMERCE

BONAFIDE CERTIFICATE

REG NO:_____

This is to certify that this is a bonafide record work done by _____ of **II M.Com(Computer Application)** during the academic year June 2019 – Nov 2019 and submitted for the practical examination in **VB.NET – PRACTICAL (19CPU311)** held on _____

Staff-in-charge	**Head of the Department**
Internal Examiner	**External Examiner**

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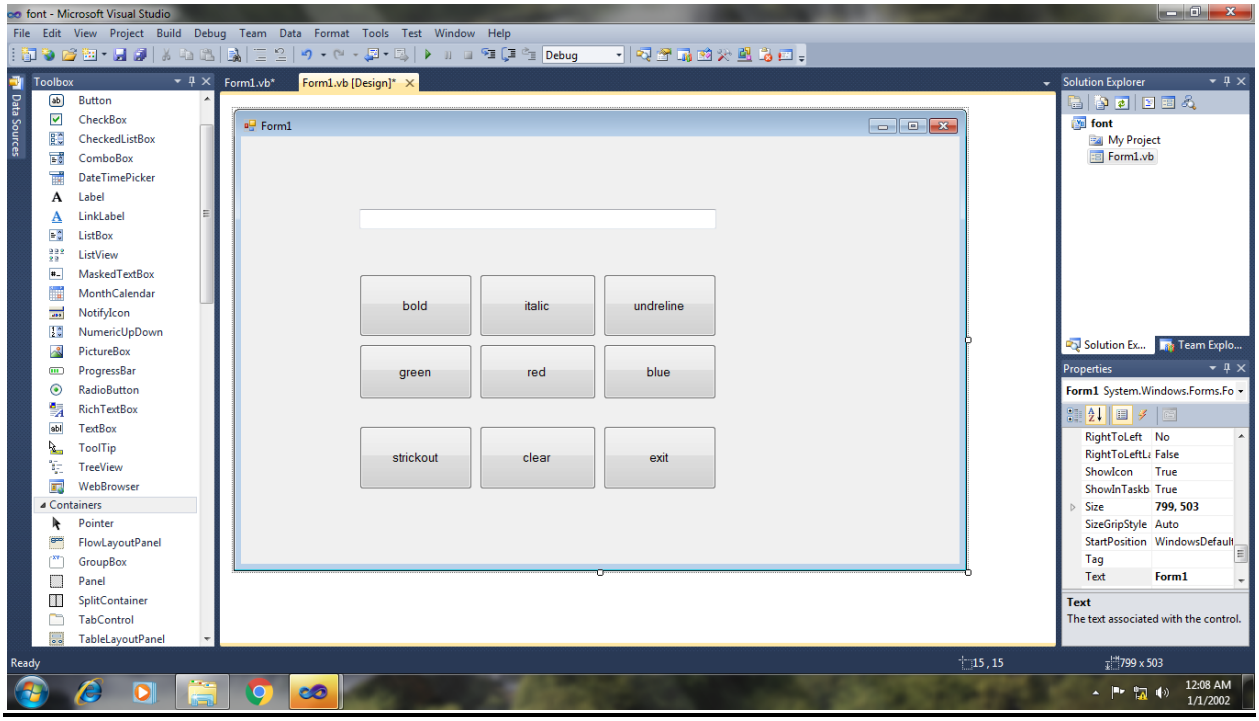
Ex. No. 1 - Font Application

Form Design

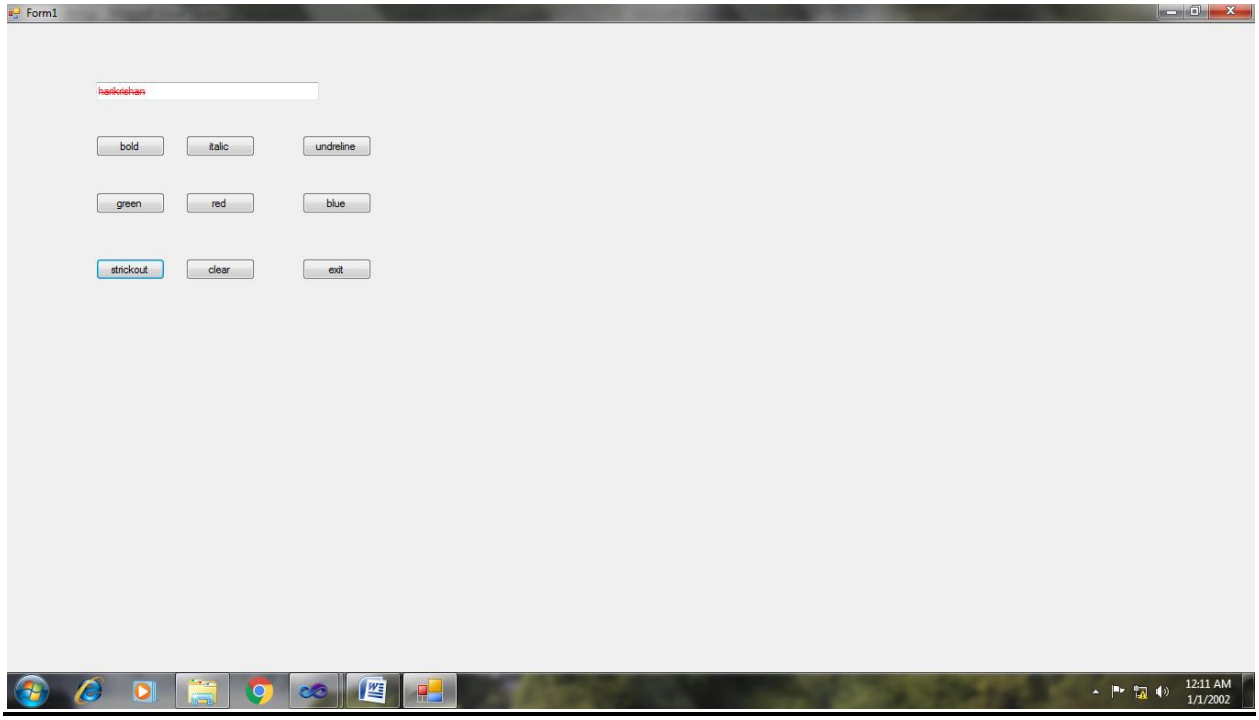


Coding

```
Public Class Form1

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click
        If TextBox1.Font.Italic = False Then
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Italic)
        Else
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Regular)
        End If
    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        If TextBox1.Font.Bold = False Then
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Bold)
        Else
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Regular)
        End If

    End Sub

    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button3.Click
        If TextBox1.Font.Underline = False Then
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Underline)
        Else
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Regular)
        End If

    End Sub

    Private Sub Button7_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button7.Click
        If TextBox1.Font.Strikeout = False Then
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Strikeout)
        Else
            TextBox1.Font = New Font(TextBox1.Font, FontStyle.Regular)
        End If

    End Sub

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

    End Sub

    Private Sub Button8_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button8.Click
        TextBox1.Text = ""

    End Sub

    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button4.Click
        TextBox1.ForeColor = Color.Green


    End Sub

    Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button5.Click
        TextBox1.ForeColor = Color.Red
```

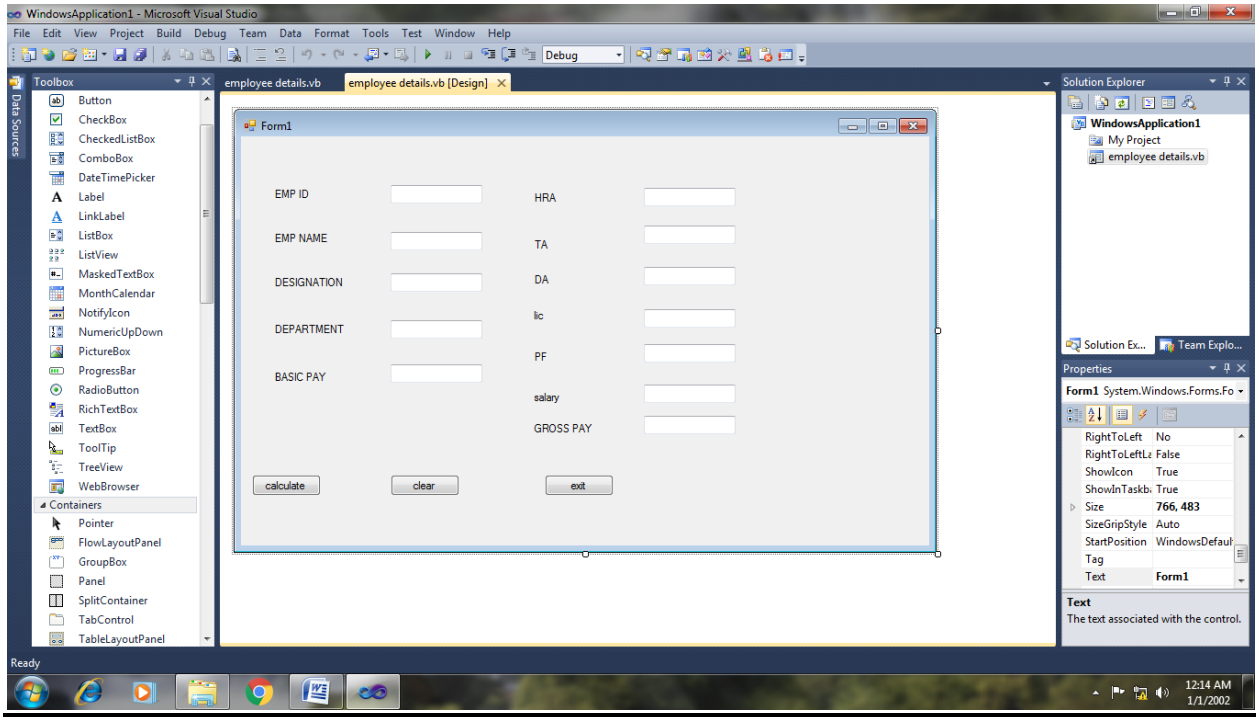
```
    End Sub

    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button6.Click
        TextBox1.ForeColor = Color.DarkBlue

    End Sub

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

    End Sub
End Class
```

Output Form


Form1
harikrishan
bold
italic
undreline
green
red
blue
strickout
clear
exit
12:11 AM
1/1/2002

Ex. No. 2 - Employee Details

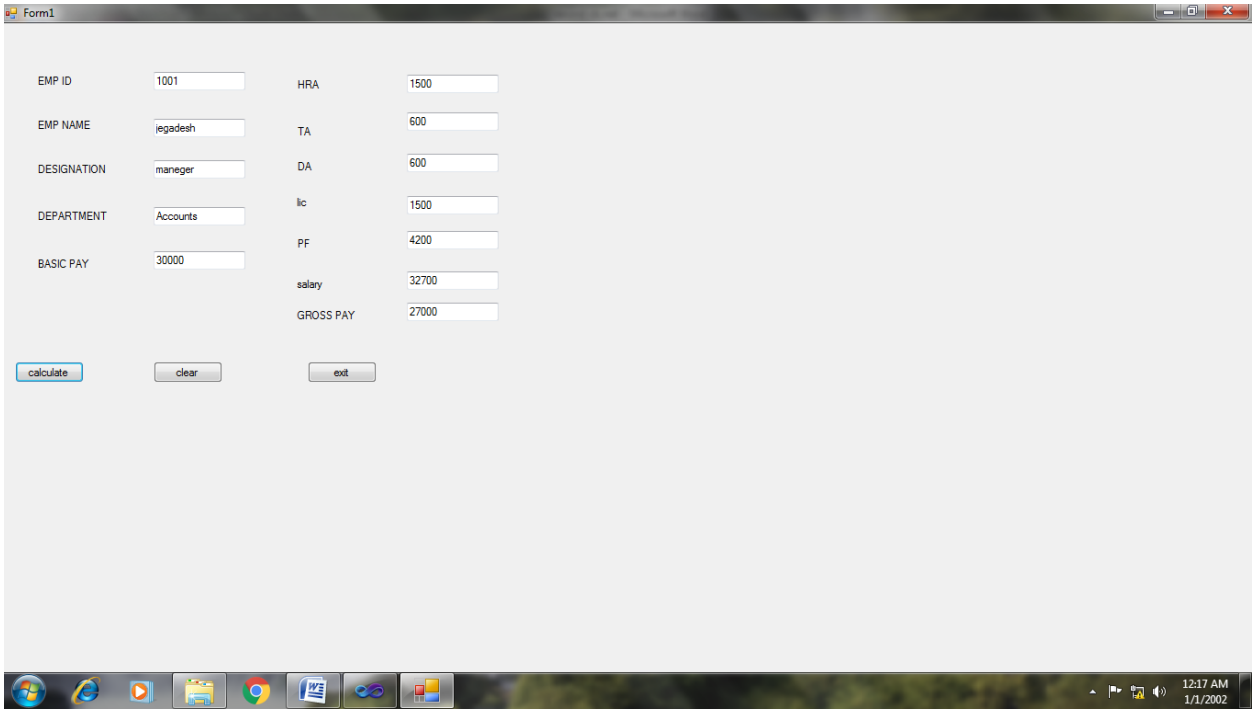
Form Design



Coding

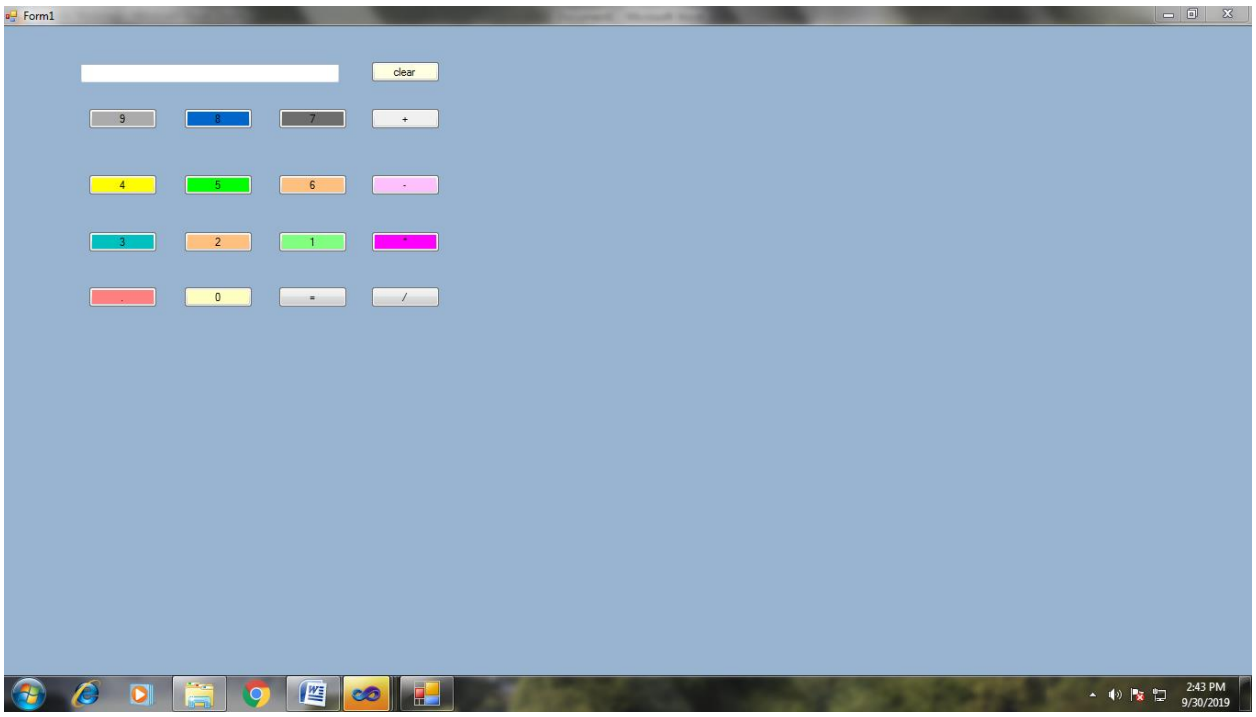
```
Public Class Form1
    Dim hra, pf, ta, da, lic, bp, det, gp, salary As Double

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        bp = Val(TextBox5.Text)
        hra = Val(TextBox5.Text) * 0.05
        ta = Val(TextBox5.Text) * 0.02
        da = Val(TextBox5.Text) * 0.02
        pf = Val(TextBox5.Text) * 0.14
        lic = Val(TextBox5.Text) * 0.05
        salary = bp + hra + ta + da
        det = pf + lic
        gp = salary - det
        TextBox6.Text = hra
        TextBox7.Text = ta
        TextBox8.Text = da
        TextBox9.Text = lic
        TextBox10.Text = pf
        TextBox11.Text = salary
        TextBox12.Text = gp

    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        TextBox7.Text = ""
        TextBox8.Text = ""
        TextBox9.Text = ""
        TextBox10.Text = ""
        TextBox11.Text = ""
        TextBox12.Text = ""

    End Sub

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

    End Sub
End Class
```

Output Form


Form1
EMP ID
1001
EMP NAME
jegadesh
DESIGNATION
maneger
DEPARTMENT
Accounts
BASIC PAY
30000
HRA
1500
TA
600
DA
600
lic
1500
PF
4200
salary
32700
GROSS PAY
27000
calculate
clear
exit
12:17 AM
1/1/2002

Ex. No. 3 - Calculator

Form Design

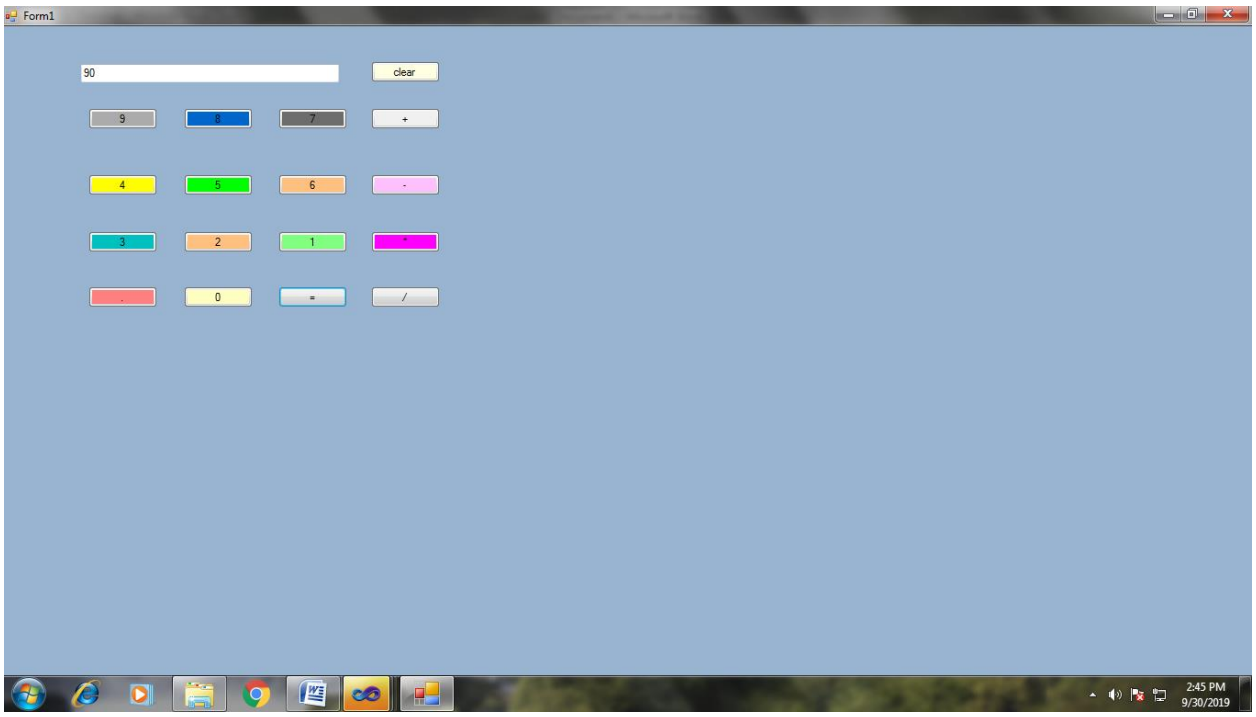


Coding

```
Public Class Form1
    Dim a, b, c As Double
    Dim op As Integer

    Private Sub Button11_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button11.Click
        TextBox1.Text = TextBox1.Text + "1"

    End Sub

    Private Sub Button10_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button10.Click
        TextBox1.Text = TextBox1.Text + "2"
    End Sub

    Private Sub Button9_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button9.Click
        TextBox1.Text = TextBox1.Text + "3"
    End Sub

    Private Sub Button5_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button5.Click
        TextBox1.Text = TextBox1.Text + "4"
    End Sub

    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button6.Click
        TextBox1.Text = TextBox1.Text + "5"
    End Sub

    Private Sub Button7_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button7.Click
        TextBox1.Text = TextBox1.Text + "6"
    End Sub

    Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button3.Click
        TextBox1.Text = TextBox1.Text + "7"
    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click
        TextBox1.Text = TextBox1.Text + "8"
    End Sub

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        TextBox1.Text = TextBox1.Text + "9"
    End Sub

    Private Sub Button14_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button14.Click
        TextBox1.Text = TextBox1.Text + "0"
    End Sub

    Private Sub Button13_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button13.Click
        TextBox1.Text = TextBox1.Text + "."
    End Sub

    Private Sub Button17_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button17.Click
        TextBox1.Text = ""
    End Sub

    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button4.Click
        a = Val(TextBox1.Text)
        op = 1
        TextBox1.Text = " "
```

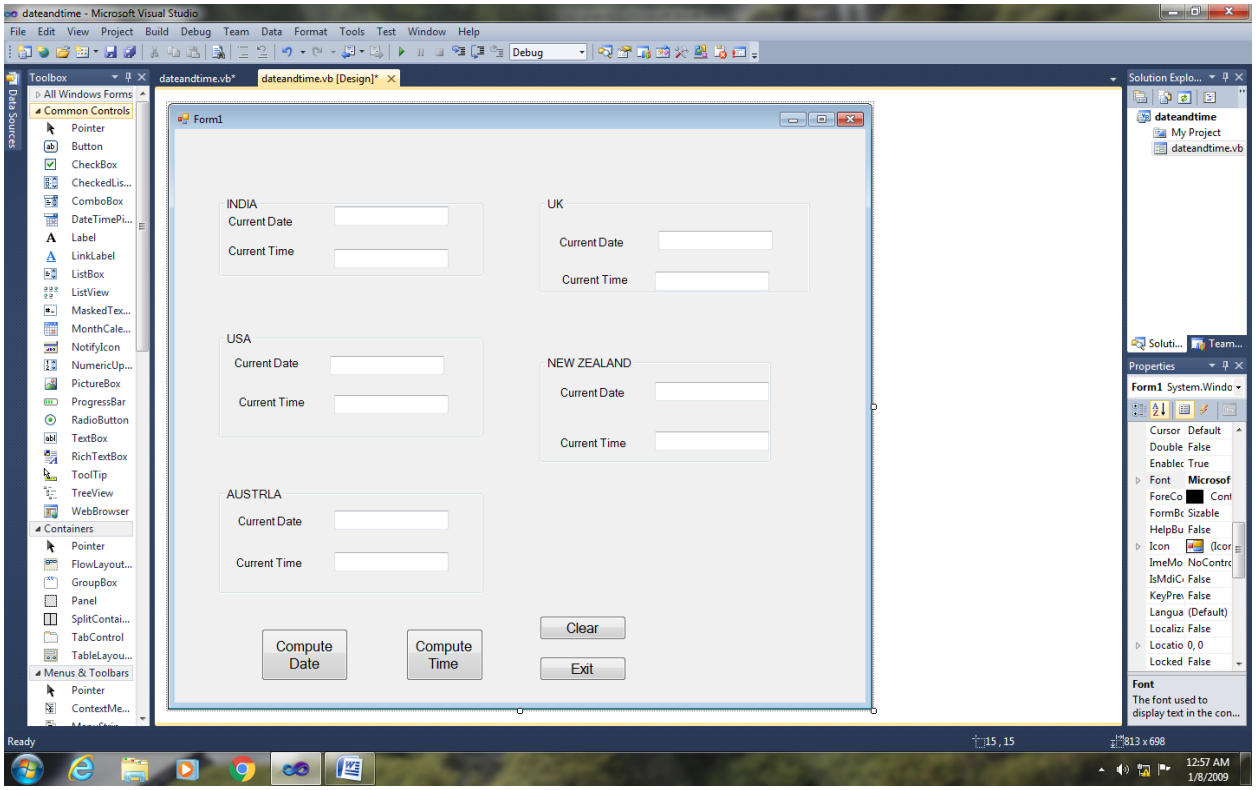
```
    End Sub

    Private Sub Button8_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button8.Click
        a = Val(TextBox1.Text)
        op = 2
        TextBox1.Text = " "


    End Sub

    Private Sub Button12_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button12.Click
        a = Val(TextBox1.Text)
        op = 3
        TextBox1.Text = " "
    End Sub

    Private Sub Button16_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button16.Click
        a = Val(TextBox1.Text)
        op = 4
        TextBox1.Text = " "
    End Sub

    Private Sub Button15_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button15.Click
        b = Val(TextBox1.Text)
        Select Case op
            Case 1
                c = a + b
            Case 2
                c = a - b
            Case 3
                c = a * b
            Case 4
                c = a / b

        End Select
        TextBox1.Text = c
    End Sub
End Class
```

Output Design



Ex. No. 4 - Date and Time Handling Function

Form Design

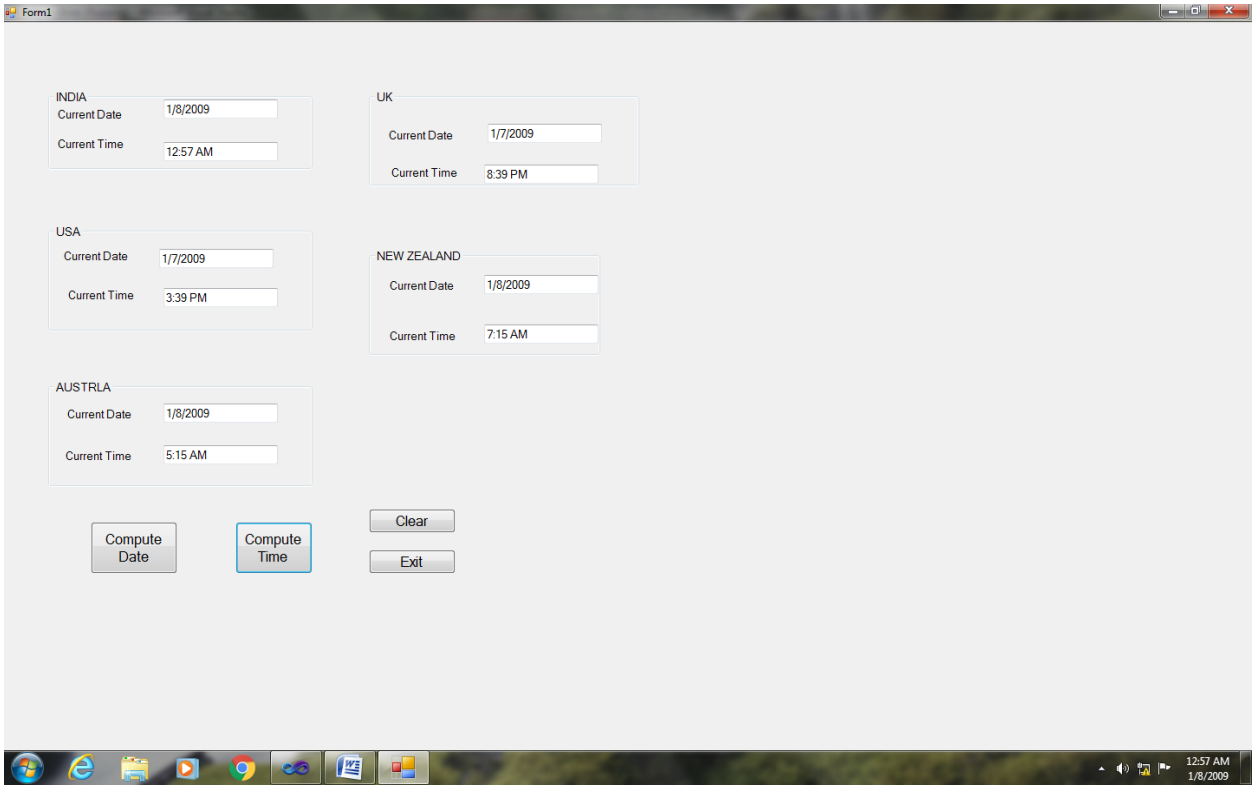


Coding

```
Public Class Form1

    Dim ind, usa, uk, nz, aus As Date

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button1.Click
        ind = Now
        aus = Now.AddHours(4.3)
        nz = Now.AddHours(6.3)
        usa = Now.AddHours(-9.3)
        uk = Now.AddHours(-4.3)
        TextBox1.Text = Format(Now, "short date")
        TextBox3.Text = Format(usa, "short date")
        TextBox5.Text = Format(aus, "short date")
        TextBox7.Text = Format(uk, "short date")
        TextBox9.Text = Format(nz, "short date")
    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button2.Click
        ind = Now
        aus = Now.AddHours(4.3)
        nz = Now.AddHours(6.3)
        usa = Now.AddHours(-9.3)
        uk = Now.AddHours(-4.3)
        TextBox2.Text = Format(Now, "short time")
        TextBox4.Text = Format(usa, "short time")
        TextBox6.Text = Format(aus, "short time")
        TextBox8.Text = Format(uk, "short time")
        TextBox10.Text = Format(nz, "short time")
    End Sub

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

    Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button4.Click
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
```

```
        TextBox7.Text = ""
        TextBox8.Text = ""
        TextBox9.Text = ""
        TextBox10.Text = ""
    End Sub
End Class
```

Output Form

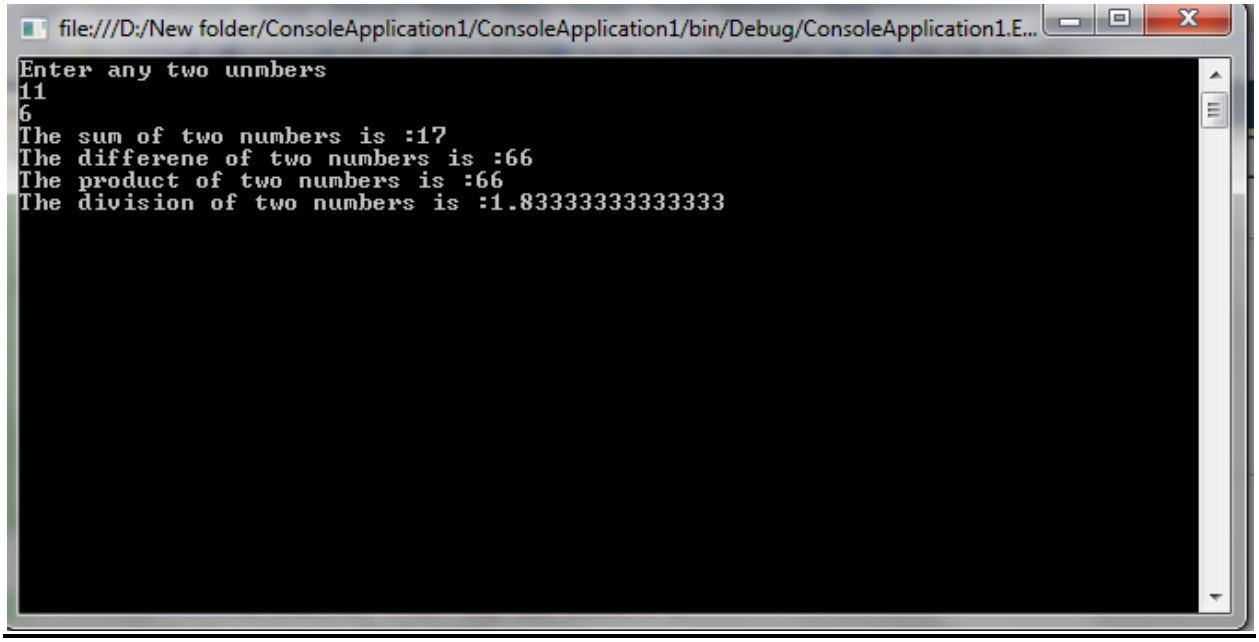

Form1
INDIA
Current Date
1/8/2009
Current Time
12:57 AM
UK
Current Date
1/7/2009
Current Time
8:39 PM
USA
Current Date
1/7/2009
Current Time
3:39 PM
NEW ZEALAND
Current Date
1/8/2009
Current Time
7:15 AM
AUSTRLA
Current Date
1/8/2009
Current Time
5:15 AM
Compute Date
Compute Time
Clear
Exit
12:57 AM
1/8/2009

Ex. No. 5 - Classes and Object

Coding

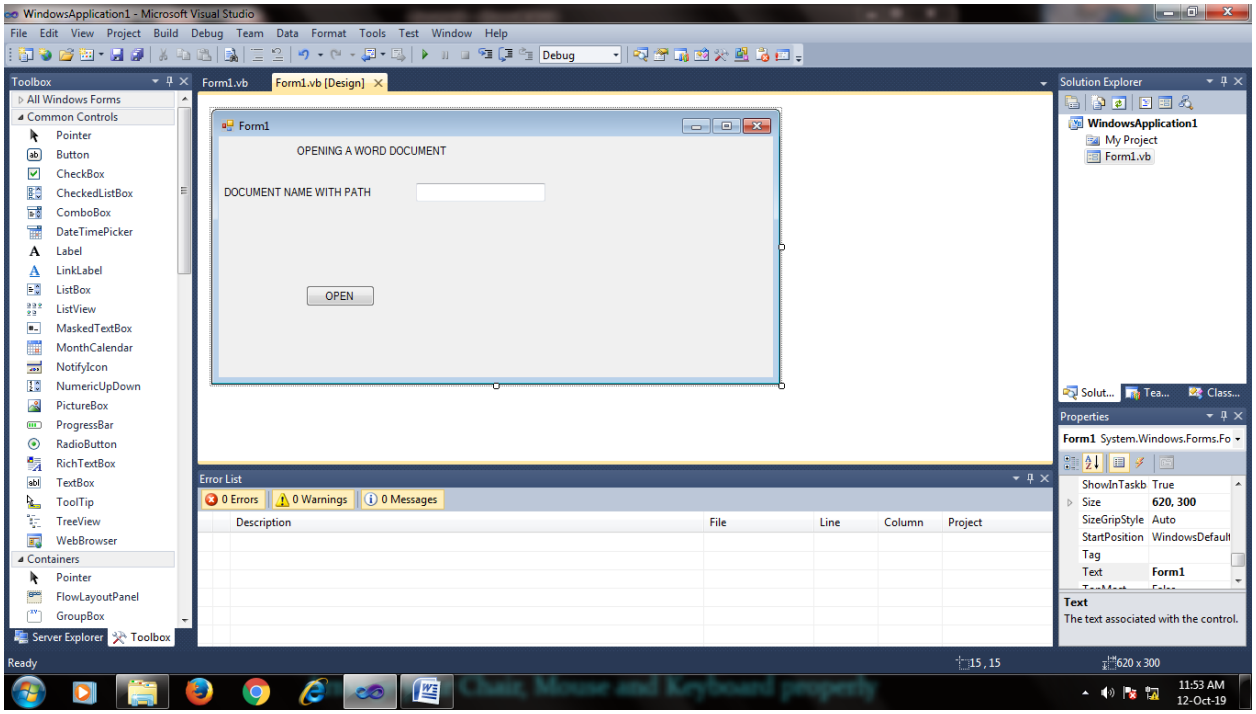
```
Module Module1

    Public Class calc
        Dim a, b As Double
        Dim res As Double

        Function mul(ByVal x As Integer, ByVal y As Integer) As Double
            a = x
            b = y
            res = a * b
            Return res
        End Function

        Function add(ByVal x As Integer, ByVal y As Integer) As Double
            a = x
            b = y
            res = a + b
            Return res
        End Function

        Function diff(ByVal x As Integer, ByVal y As Integer) As Double
            a = x
            b = y
            res = a * b
            Return res
        End Function

        Function div(ByVal x As Integer, ByVal y As Integer) As Double
            a = x
            b = y
            res = a / b
            Return res
        End Function
    End Class

    Sub Main()
        Dim ob As calc = New calc()
        Dim value1, value2 As Integer
        Console.WriteLine("Enter any two unmbers")
        value1 = Console.ReadLine()
        value2 = Console.ReadLine()
        Console.WriteLine("The sum of two numbers is :" & ob.add(value1, value2))
        Console.WriteLine("The differene of two numbers is :" & ob.diff(value1, value2))
        Console.WriteLine("The product of two numbers is :" & ob.mul(value1, value2))
        Console.WriteLine("The division of two numbers is :" & ob.div(value1, value2))
        Console.ReadKey()
    End Sub
End Module
```

Output


file:///D:/New folder/ConsoleApplication1/ConsoleApplication1/bin/Debug/ConsoleApplication1.E...
Enter any two unmbers
11
6
The sum of two numbers is :17
The differene of two numbers is :66
The product of two numbers is :66
The division of two numbers is :1.83333333333333

Ex. No. 6 - Creating and Reading a Word Document

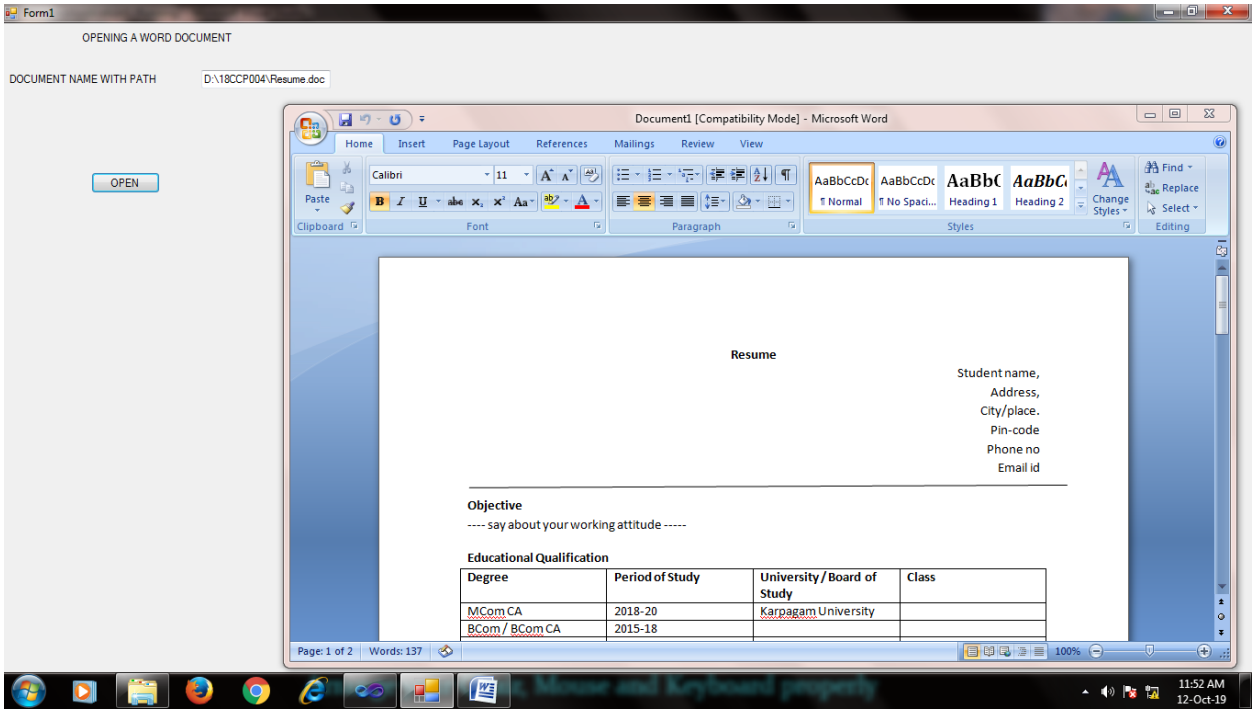
Form Design



Coding

```
Imports Microsoft.Office.Interop.Word

Public Class Form1

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        Dim doc As Document
        Dim oword As Application
        oword = CreateObject("word.application")
        oword.Visible = True
        doc = oword.Documents.Add("D:\18CCP004\Resume.doc")
    End Sub
End Class
```

Output Design



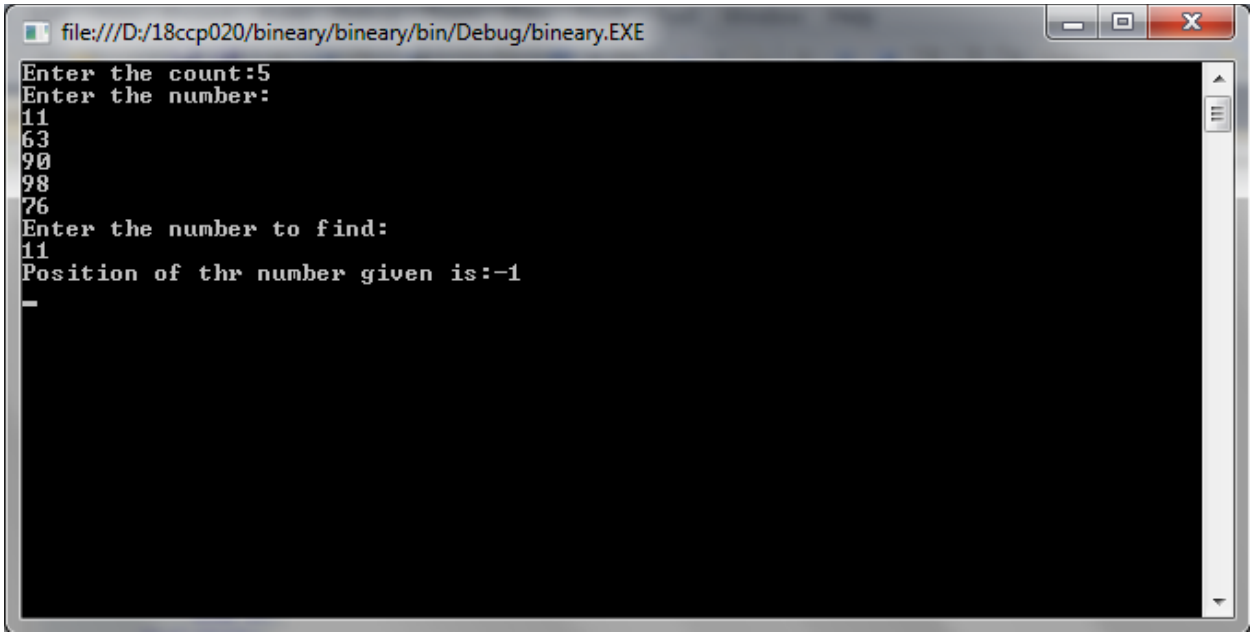
Ex. No. 7 - Binary Search

Coding

```
Module Module1
    Function binarysearch(ByVal data As Integer(), ByVal value As Integer) As Integer
        Dim low, high, midpoint As Integer
        low = 0
        high = Data.length - 1
        midpoint = 0
        While low <= high
            midpoint = low + (high - low) / 2
            If value = Data(midpoint) Then
                Return midpoint
            ElseIf value < data(midpoint) Then
                high = midpoint - 1
            Else
                low = midpoint + 1
            End If
        End While
        Return -1
    End Function
    Sub Main()
        Dim numbers(10), n, fn, i As Integer
        Console.Write("Enter the count:")
        n = Console.ReadLine()
        Console.WriteLine("Enter the number:")
        For i = 0 To n - 1
            numbers(i) = Console.ReadLine()
        Next
        Console.WriteLine("Enter the number to find:")
        fn = Console.ReadLine()
        Dim val = binarysearch(numbers, fn)
```

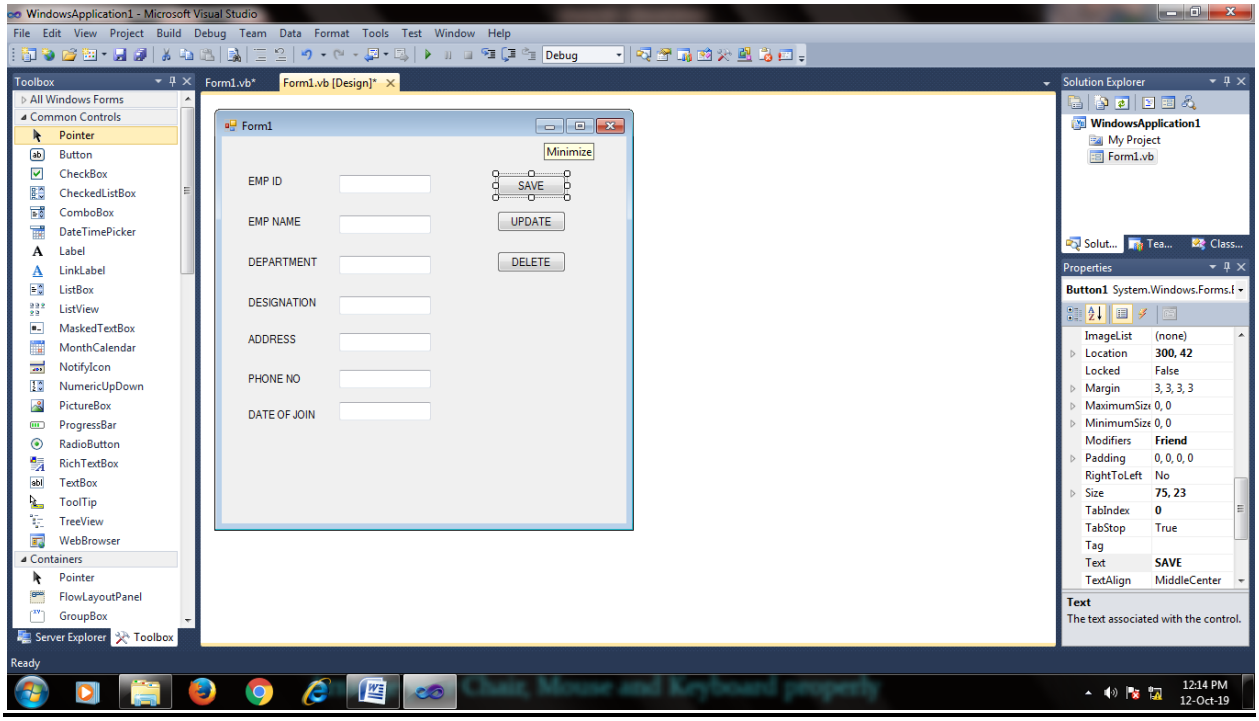
```
        Console.WriteLine("Position of thr number given is:" & val)
        Console.ReadKey()
    End Sub
End Module
```

Output


file:///D:/18ccp020/bineary/bineary/bin/Debug/bineary.EXE
Enter the count:5
Enter the number:
11
63
90
98
76
Enter the number to find:
11
Position of thr number given is:-1

Ex. No. 8 – Employee Profile

Form Design

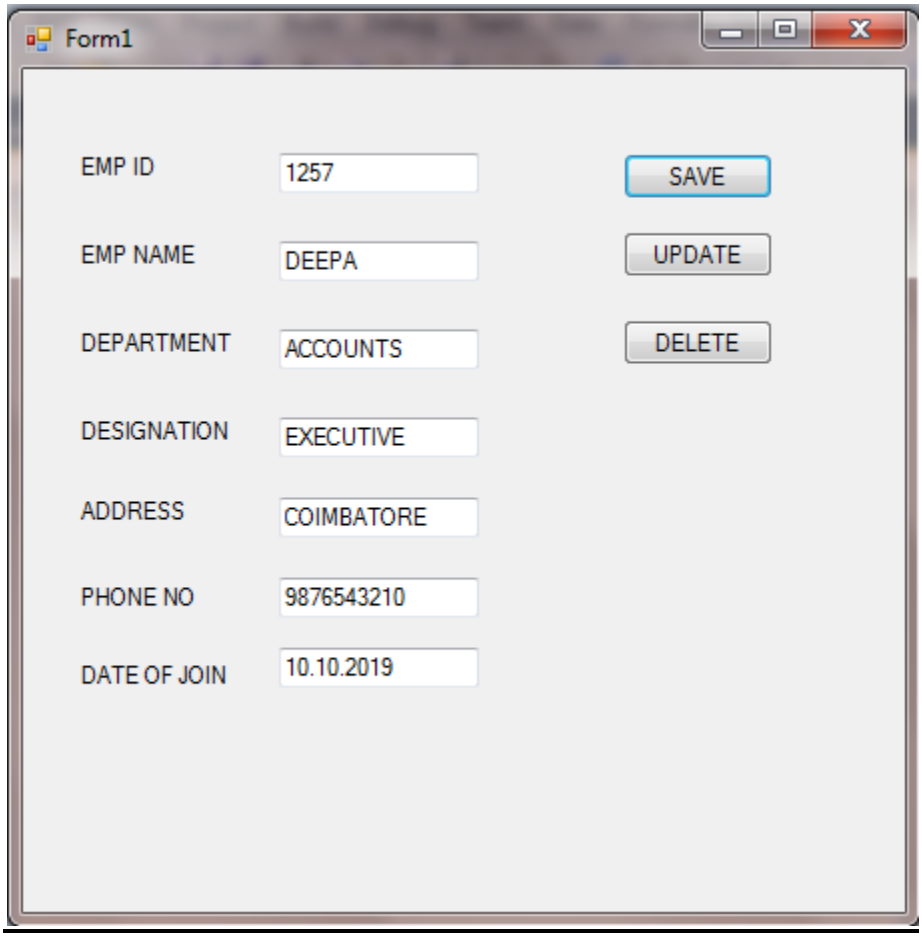


Coding

```
dim con as sqlconnection

dim cmd as sqlcommand

dim adp as sqladapter

dim data as dataset1

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

con.connectionstring="Provider=SQLOLEDB;initialcatalog=preethi;database=ACER;integrated security=true"

cmd.connection=con

cmd=new sqlcommand("select * from emp"),con

adp=new sqldataadapter(cmd)

adp.Fill(data)

textbox1.text=data.tables(1).rows(0).item(0)

textbox2.text=data.tables(1).rows(0).item(1)

textbox3.text=data.tables(1).rows(0).item(2)

textbox4.text=data.tables(1).rows(0).item(2)

textbox5.text=data.tables(1).rows(0).item(2)

textbox6.text=data.tables(1).rows(0).item(2)

textbox7.text=data.tables(1).rows(0).item(2)

End Sub


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

cmd = new sqlcommand("insert into emp values( ' " & textbox1.text & " ', " & textbox2.text & ", ' " & textbox3.text & " , " & textbox4.text & ", ' " & textbox5.text & " ', " & textbox6.text & ", ' " & textbox7.text & “’)" , con

cmd.executeNonQuery()
```

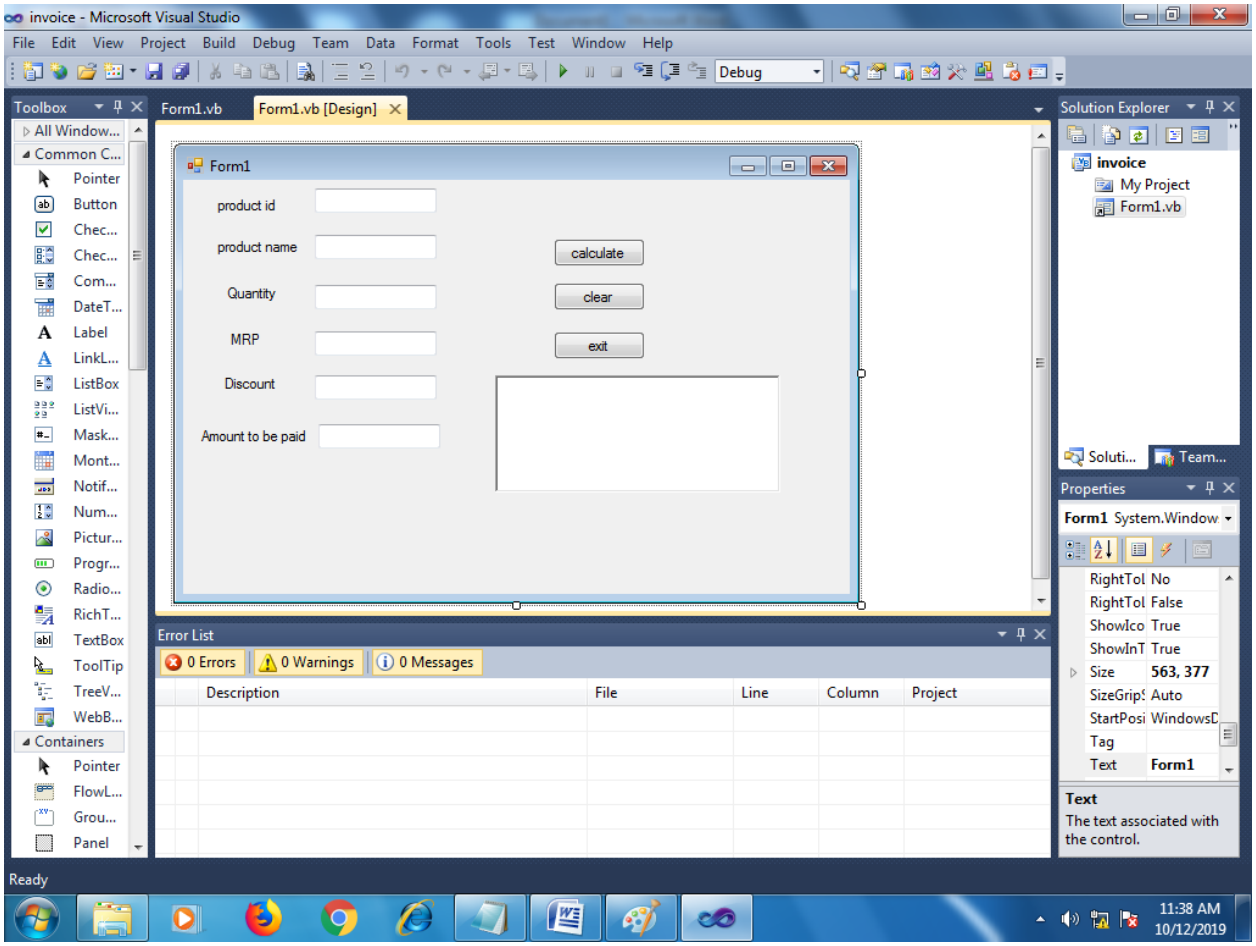
```
Response.write(" One record inserted").
End Sub


Private Sub Button3_Click(sender As Object, e As EventArgs) Handles Button2.Click
Dim iRet As Integer
Try
        iRet = cmd.ExecuteNonQuery()
        litMsg.Text = String.Format("Deleted {0} records", iRet)
    Catch ex As System.Exception
        litMsg.Text = String.Format("Error: {0}", ex.ToString)
    Finally
        conn.Close()
    End Try
End Sub
End Class
```

Output


Form1
EMP ID
1257
SAVE
EMP NAME
DEEPA
UPDATE
DEPARTMENT
ACCOUNTS
DELETE
DESIGNATION
EXECUTIVE
ADDRESS
COIMBATORE
PHONE NO
9876543210
DATE OF JOIN
10.10.2019

Ex. No. 9 – Inventory Management

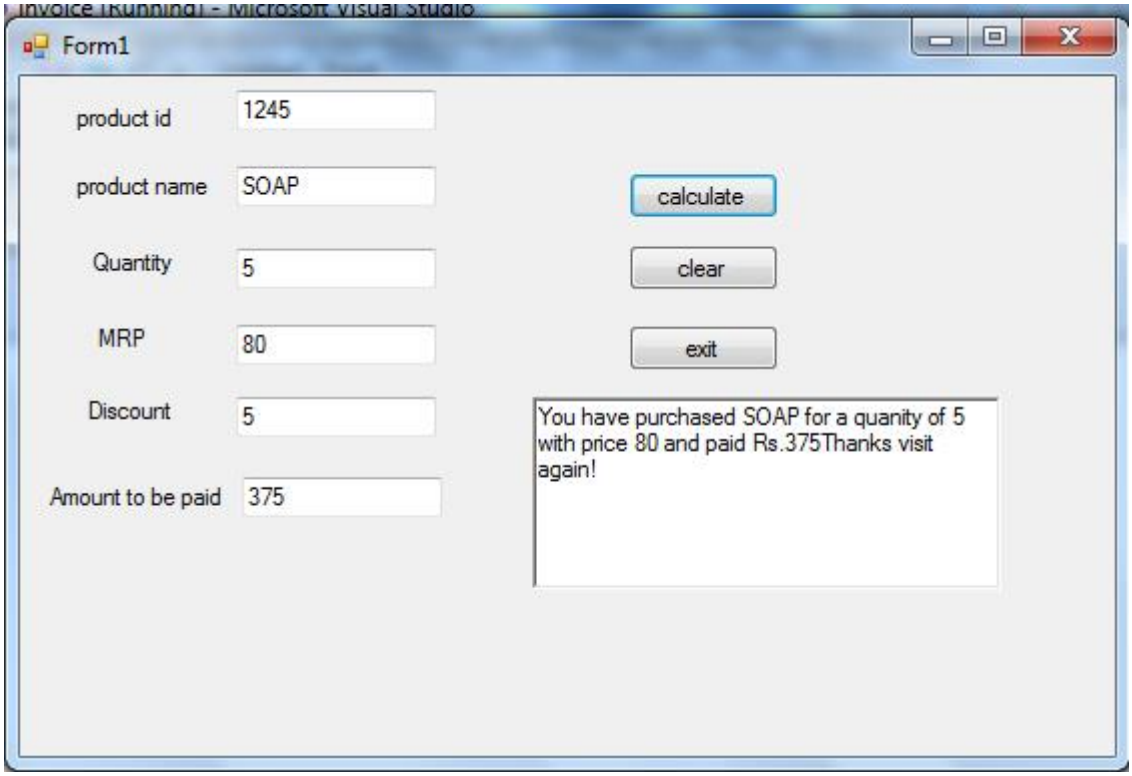
Form Design



Coding

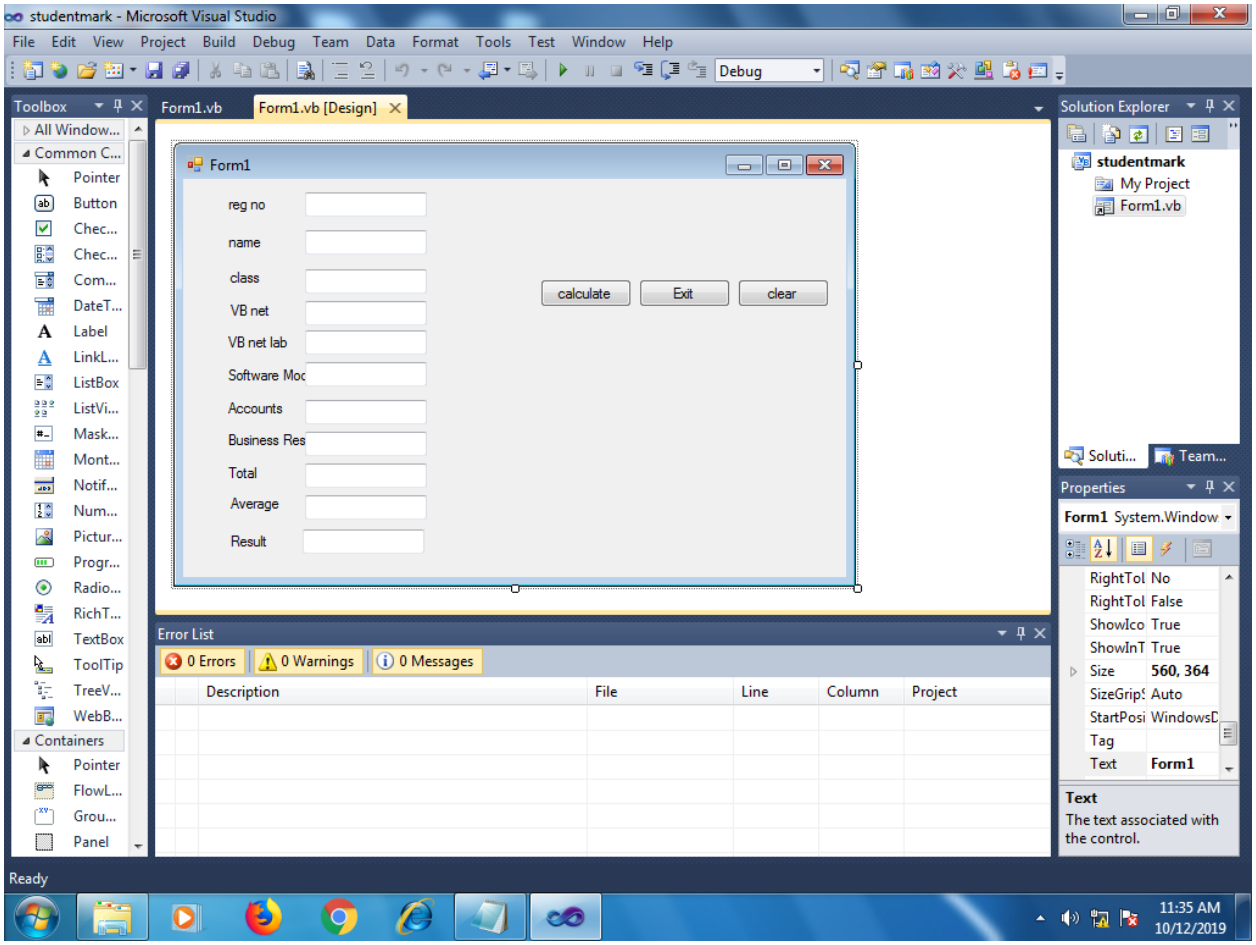
```
Public Class Form1

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        Dim q As Integer
        Dim mrp, dis, atp As Double
        q = TextBox3.Text
        mrp = TextBox4.Text
        dis = TextBox5.Text
        atp = (mrp - dis) * q
        TextBox6.Text = atp
        RichTextBox1.Text = "You have purchased " & TextBox2.Text & " for a quanity of " & TextBox3.Text & " with
price " & TextBox4.Text & " and paid Rs." & TextBox6.Text & "Thanks visit again!"

    End Sub

    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button6.Click
        TextBox1.Text = " "
        TextBox2.Text = " "
        TextBox3.Text = " "
        TextBox4.Text = " "
        TextBox5.Text = " "
        TextBox6.Text = " "
    End Sub

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

Output Form



Ex. No. 10 – Student Mark Entry System

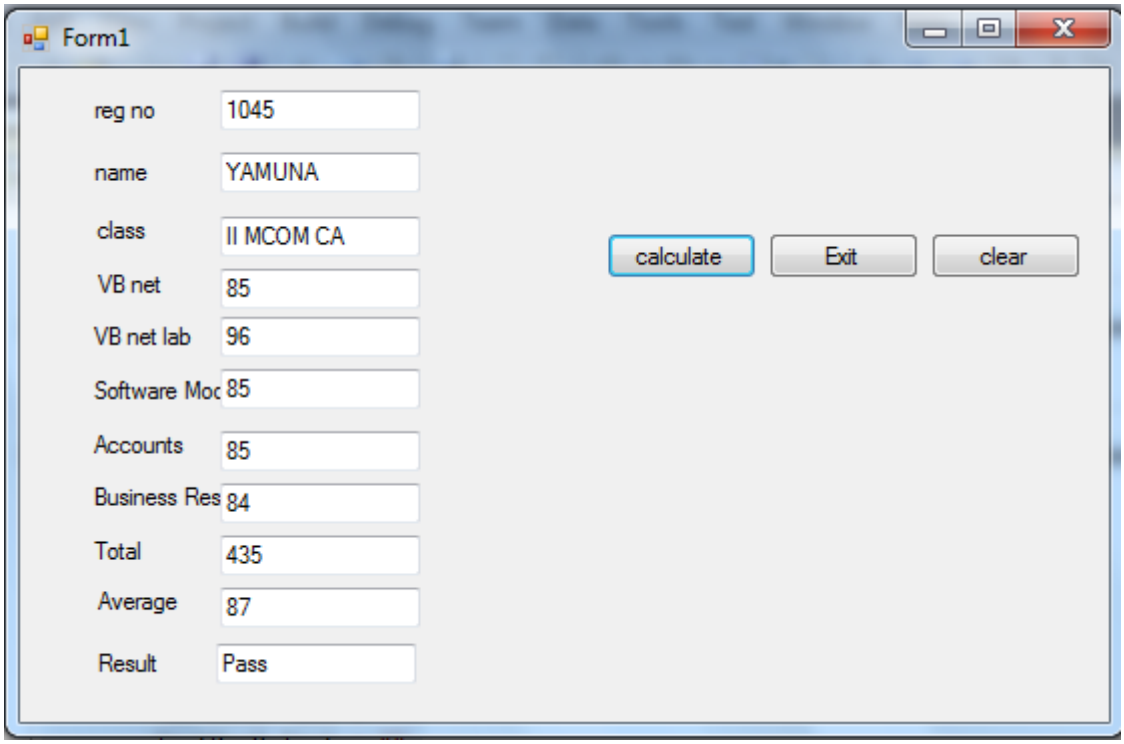
Form Design



Coding

```
Public Class Form1

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        TextBox9.Text = Val(TextBox4.Text) + Val(TextBox5.Text) + Val(TextBox6.Text) + Val(TextBox7.Text) +
Val(TextBox8.Text)
        TextBox10.Text = Val(TextBox9.Text) / 5
        If (Val(TextBox4.Text) >= 50 And Val(TextBox5.Text) >= 50 And Val(TextBox6.Text) >= 50 And
Val(TextBox7.Text) >= 50 And Val(TextBox8.Text) >= 50) Then
            TextBox11.Text = "Pass"
        Else
            TextBox11.Text = "Fail"
        End If
    End Sub

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

    Private Sub Button6_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button6.Click
        TextBox1.Text = ""
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        TextBox7.Text = ""
        TextBox8.Text = ""
        TextBox9.Text = ""
        TextBox10.Text = ""
        TextBox11.Text = ""
    End Sub
End Class
```

Output


Form1
reg no
1045
name
YAMUNA
class
II MCOM CA
VB net
85
VB net lab
96
Software Mod
85
Accounts
85
Business Res
84
Total
435
Average
87
Result
Pass
calculate
Exit
clear