

Experiments of Visual Basic: Programming Lab Assignment

Roll no.: - 18115004

Name: Ajay Kumar

Experiment 1: -WAP to demonstrate use of button and MsgBox to display a message.

Code:

```
Public Class Form1
```

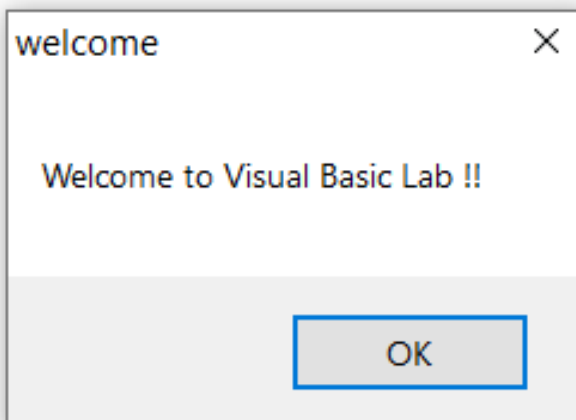
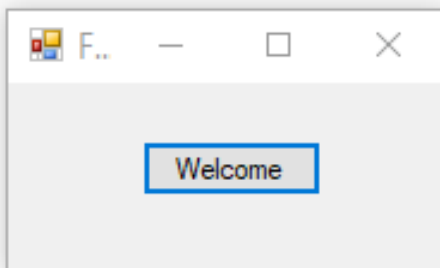
```
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)  
Handles Button1.Click
```

```
        MsgBox("Welcome to Visual Basic Lab !!")
```

```
    End Sub
```

```
End Class
```

Output:

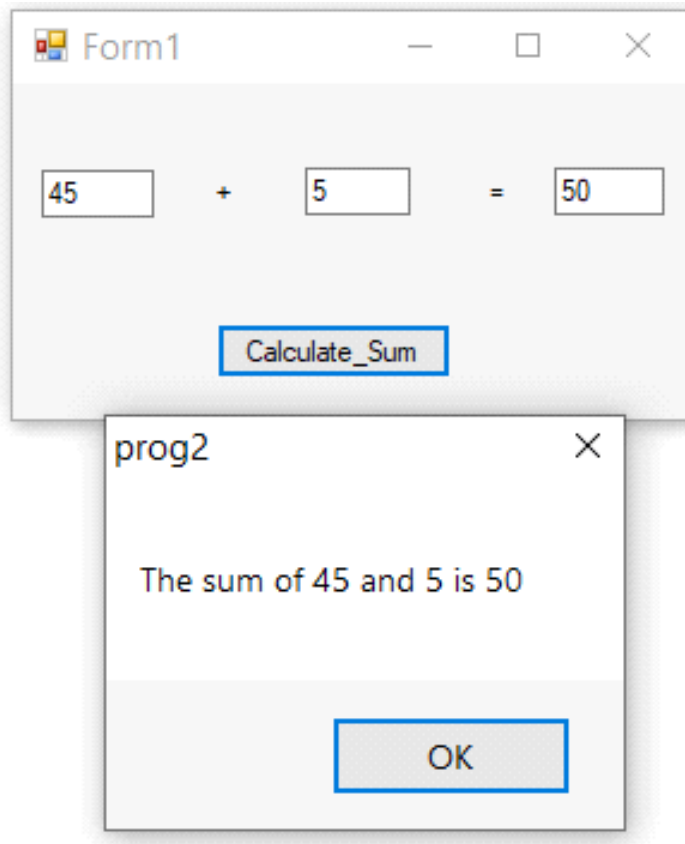


Experiment No. 2 : WAP to perform sum of two numbers using textbox, labels, and button.

Code:

```
Public Class Form1
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        Dim num1, num2, sum As Single
        num1 = TextBox1.Text
        num2 = TextBox2.Text
        sum = num1 + num2
        TextBox3.Text = sum
        MsgBox("The sum of " & num1 & " and " & num2 & " is " & sum)
    End Sub
End Class
```

Output:



Experiment No. 3: WAP to calculate Simple Interest.

Code:

Public Class Form1

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

Dim p, r, t, si, amt As Decimal

p = TextBox1.Text

r = TextBox2.Text

t = TextBox3.Text

si = p * r * t / 100

amt = p + si

TextBox4.Text = si

TextBox5.Text = amt

TextBox4.Visible = True

TextBox5.Visible = True

Label4.Visible = True

Label5.Visible = True

MsgBox("simple interest = " & si & " amount = " & amt)

End Sub

End Class

Output:

The screenshot shows a Windows application window titled "Form1". Inside the window, there are five input fields with labels to their left: "Principle" (value 1000), "Rate_Of_Interest" (value 8), "Time" (value 2), "Simple_Interest" (value 160), and "Amount" (value 1160). Below these fields is a button labeled "Calculate_SI". Overlaid on the bottom right of the window is a smaller message box titled "prog3". The message box contains the text "simple interest = 160 amount = 1160" and has an "OK" button at the bottom right.

Experiment No. 4: WAP to calculate Compound Interest.

Code:

```

Public Class Form1
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        Dim p, r, t, ci, amt As Decimal
        p = TextBox1.Text
        r = TextBox2.Text
        t = TextBox3.Text
        amt = p * (1 + r / 100) ^ t
        ci = amt - p
        TextBox4.Visible = True
        TextBox5.Visible = True
        TextBox4.Text = ci
        TextBox5.Text = amt
    End Sub
End Class

```

Output:

The screenshot shows a Windows application window titled "Form1". Inside the window, there are five text boxes arranged vertically, each with a label to its left. The labels and their corresponding values are: "Principle" (1000), "Rate_Of_Interest" (8), "Time" (2), "Compund Interest" (166.4), and "Amount" (1166.4). Below these text boxes is a button labeled "Calculate CI". The button has a blue border and a dotted outline.

Experiment No. 5: WAP to demonstrate use of ComboBox for favourite programming language selection.

Code:

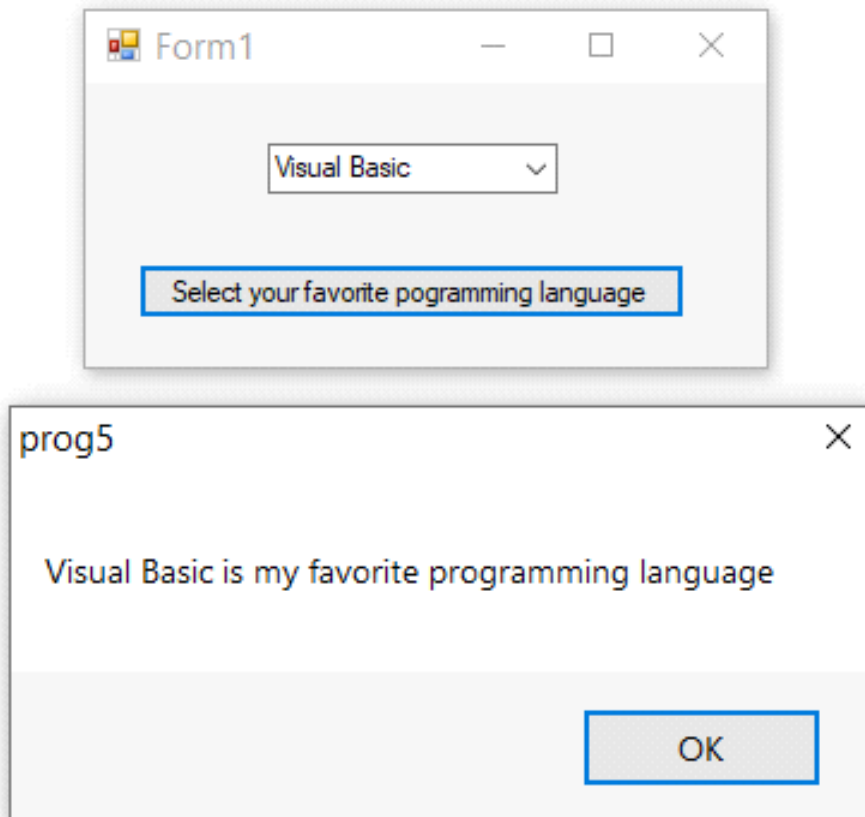
```

Public Class Form1

```

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button1.Click
    Dim language As String
    language = ComboBox1.Text
    If language = "Visual Basic" Then
        MsgBox(language & " is my favorite programming language")
    Else
        MsgBox(language & " is also a good programming language")
    End If
End Sub
End Class
```

Output:



Experiment No. 6: WAP to demonstrate use of listbox for selecting home state selection.

Code:

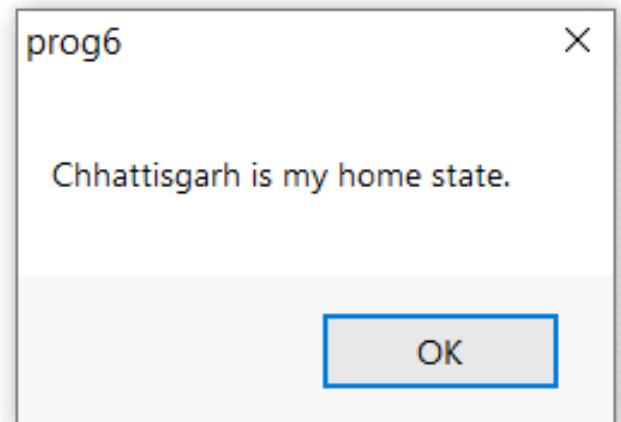
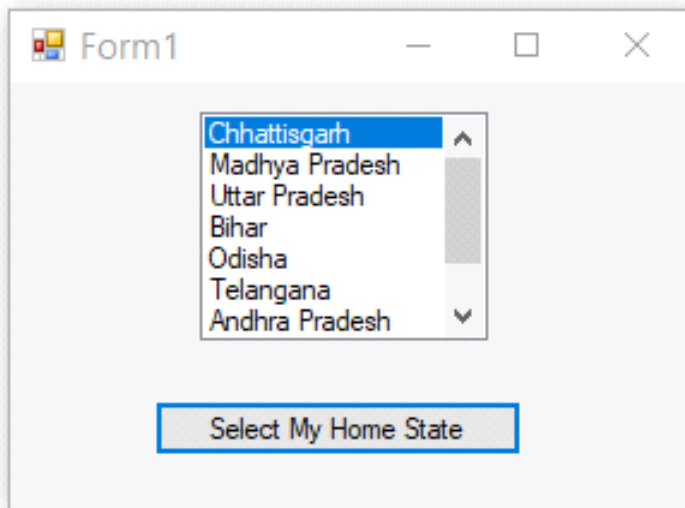
```
Public Class Form1
```

```

Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button1.Click
    Dim state As String
    state = ListBox1.Text
    If state = "Chhattisgarh" Then
        MsgBox(state & " is my home state.")
    Else
        MsgBox(state & " is not my home state.")
    End If
End Sub
End Class

```

Output:



Experiment No. 7: WAP to demonstrate use of various commands (Now () and today ()) to show current date and time.

Code:

```
Public Class Form1
```

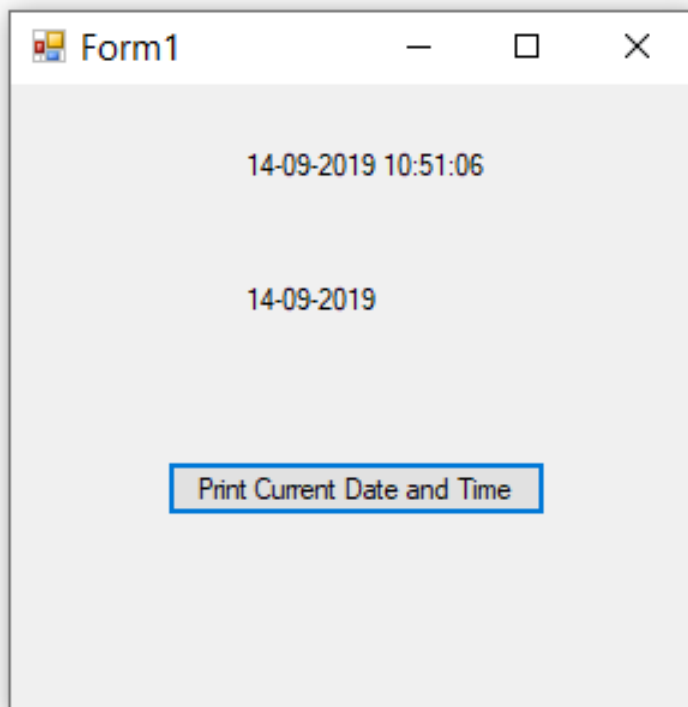
```

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button1.Click
        Label1.Text = Now()
        Label2.Text = Today()
    End Sub

```

End Class

Output:



Experiment No. 8: WAP to calculate no. of days between joining date and leaving date.

Code:

```
Public Class Form1
```

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

```
Handles Button1.Click
```

```
    Dim d1 As Date = DateTimePicker1.Value
```

```
    Dim d2 As Date = DateTimePicker2.Value
```

```
    Dim result As TimeSpan = d2.Subtract(d1)
```

```
    Dim days As Integer = result.TotalDays
```

```
    Label3.Text = days
```

```
End Sub
```

```
End Class
```

Output:

Form1

Date Of Joining

31 May 2019

Date of Leaving

14 September 2019

Calculate No. Of Days in between

106

Experiment no. 9: WAP to print the number series like 1 to 10 by using for loop concept.

Code:

```
Public Class Form1
```

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

```
        Dim counter As Integer
```

```
        For counter = 1 To 10
```

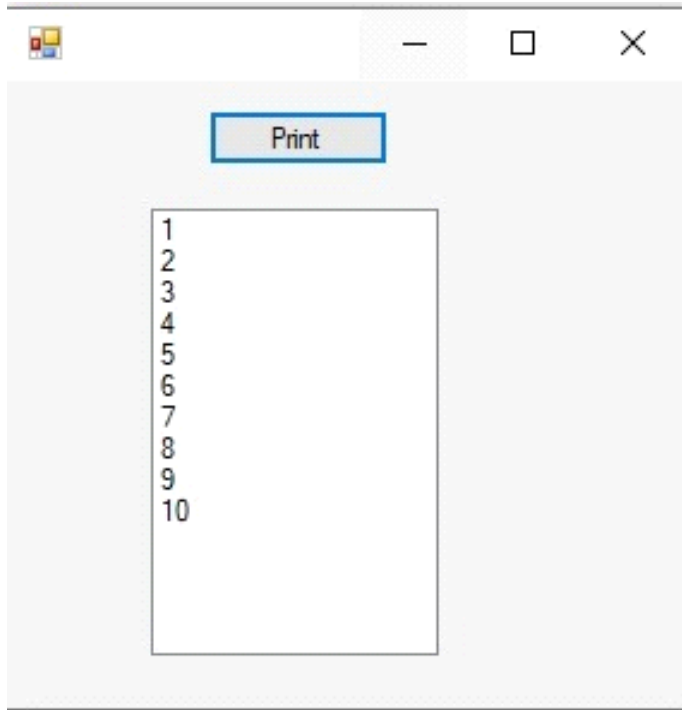
```
            ListBox1.Items.Add(counter)
```

```
        Next
```

```
    End Sub
```

```
End Class
```

Output:



Experiment no. 10: WAP to print the number series like 1 to 10.

Code:

```
Public Class Form1
```

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

```
        Dim counter As Integer = 1
```

```
        While counter <= 10
```

```
            ListBox1.Items.Add(counter)
```

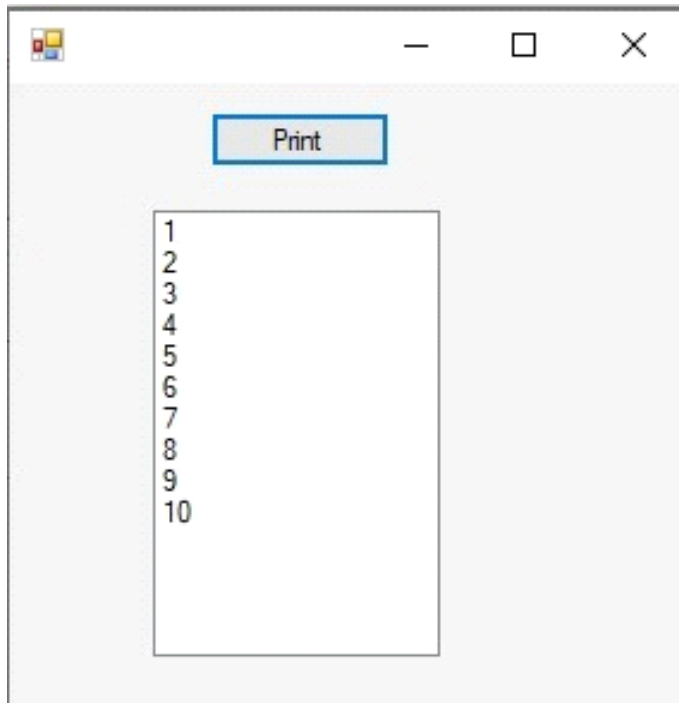
```
            counter = counter + 1
```

```
        End While
```

```
    End Sub
```

```
End Class
```

Output:



Experiment no. 11: WAP to calculate sum of numbers in given series.

Code:

```
Public Class Form1
```

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

```
        Dim counter As Integer = 1
```

```
        Dim last As Integer
```

```
        last = TextBox1.Text
```

```
        Dim sum As Integer = 0
```

```
        While counter <= last
```

```
            sum = sum + counter
```

```
            counter = counter + 1
```

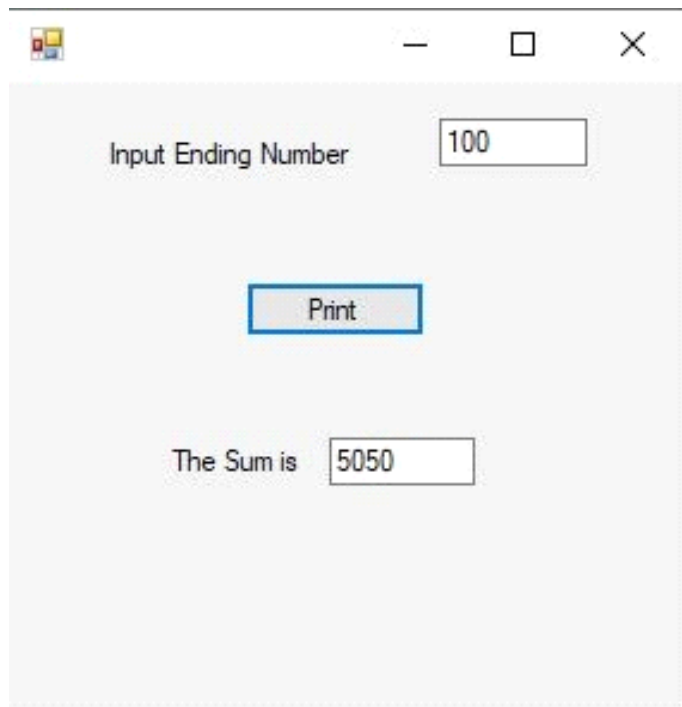
```
        End While
```

```
        TextBox2.Text = sum
```

```
    End Sub
```

```
End Class
```

Output:



Experiment no. 12: WAP to check if a number is greater than 6 or not using If Else.

Code:

```
Public Class Form1
```

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

```
        Dim num As Integer
```

```
        num = TextBox1.Text
```

```
        If num > 6 Then
```

```
            TextBox2.Text = "Number is greater than 6"
```

```
        Else
```

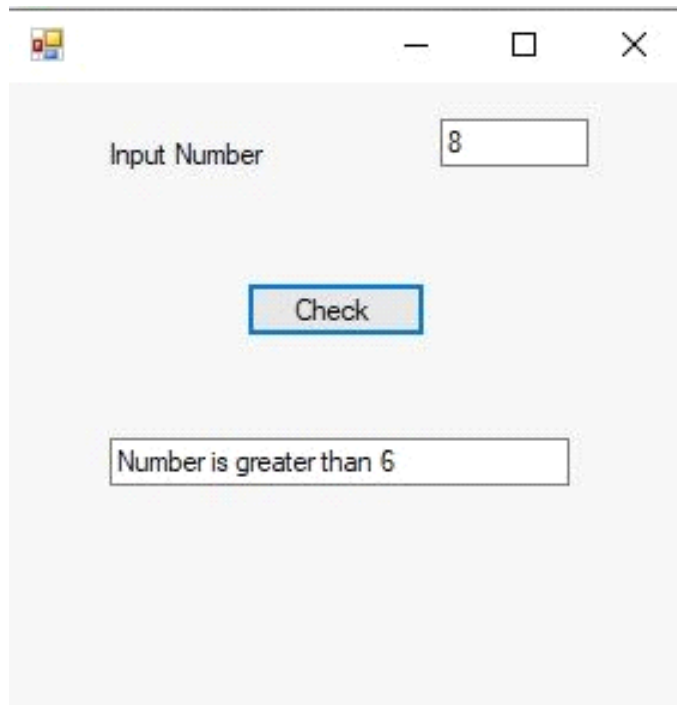
```
            TextBox2.Text = "Number is less than or equal to 6"
```

```
        End If
```

```
    End Sub
```

```
End Class
```

Output:



Experiment no. 13: WAP to provide comment on Examination marks using case concept.

Code:

```
Public Class Form1
```

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

```
        Dim marks As Single
```

```
        marks = TextBox1.Text
```

```
        Select Case marks
```

```
            Case Is >= 60
```

```
                TextBox2.Text = "First Division"
```

```
            Case Is >= 50
```

```
                TextBox2.Text = "Second Division"
```

```
            Case Is >= 40
```

```
                TextBox2.Text = "Third Division"
```

```
            Case Else
```

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

```
        End Select
```

```
    End Sub
```

```
End Class
```

Output:

A screenshot of a Windows application window. The window has a title bar with standard minimize, maximize, and close buttons. The main area is light gray. At the top left, the text 'Enter Marks' is displayed. To its right is a text box containing the number '65'. Below this, centered, is a button labeled 'Check'. At the bottom, there is another text box displaying the text 'First Division'.

Experiment no. 14: WAP to show Examination grades using case concept.

Code:

Public Class Form1

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

Handles Button1.Click

Dim marks As Single

marks = TextBox1.Text

Select Case marks

Case Is >= 90

TextBox2.Text = "Grade is A+"

Case Is >= 80

TextBox2.Text = "Grade is A"

Case Is >= 70

TextBox2.Text = "Grade is B+"

Case Is >= 60

TextBox2.Text = "Grade is B"

Case Is >= 50

TextBox2.Text = "Grade is C"

Case Is >= 40

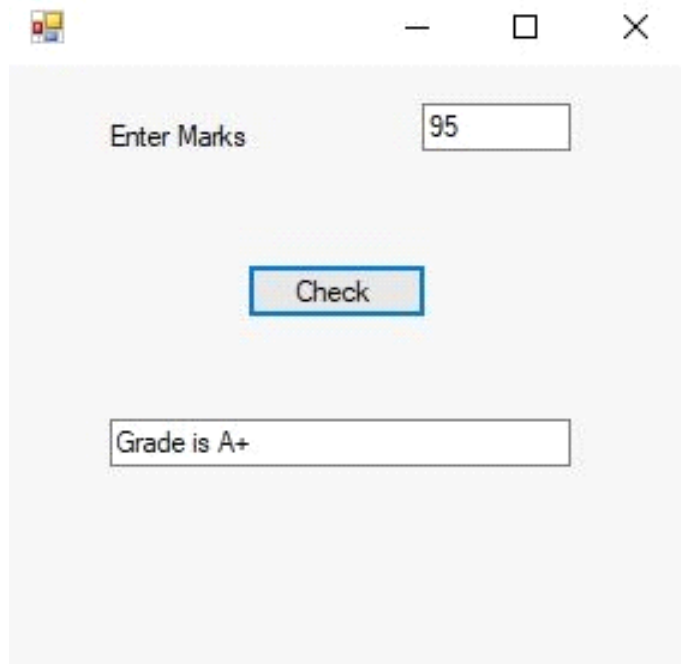
TextBox2.Text = "Grade is D"

Case Else

TextBox2.Text = "Fail"

```
End Select
End Sub
End Class
```

Output:

A screenshot of a Windows application window. The window has a title bar with a standard icon, a minus sign, a maximize button, and a close button. The main area of the window is light gray. At the top left, the text 'Enter Marks' is displayed. To its right is a text box containing the number '95'. Below this, there is a button with the text 'Check'. At the bottom, there is a label that says 'Grade is A+'.

Experiment no. 15: WAP to print message using If Else concept.

Code:

```
Public Class Form1
```

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

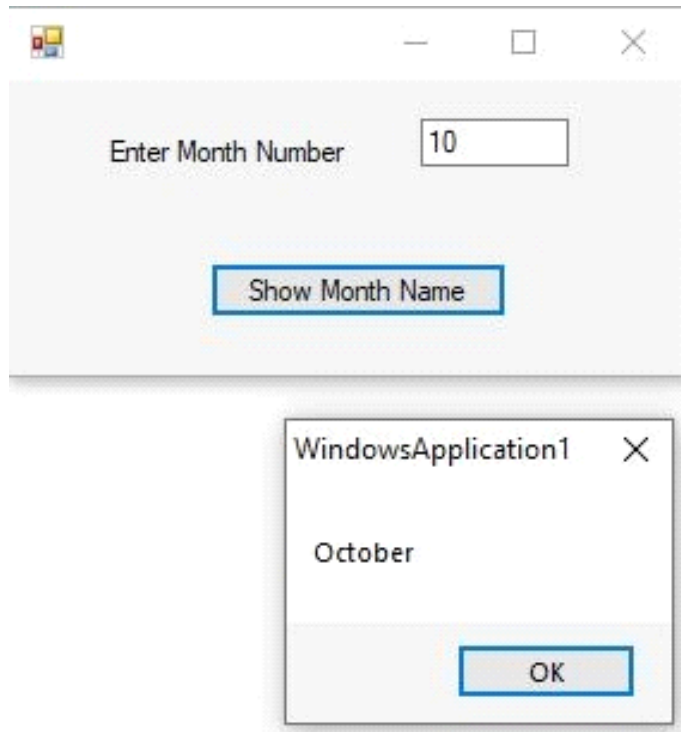
```
Dim m As Single
m = TextBox1.Text
```

```
If m = 1 Then
    MsgBox("January")
Elseif m = 2 Then
    MsgBox("February")
Elseif m = 3 Then
    MsgBox("March")
Elseif m = 4 Then
    MsgBox("April")
```

```
Elseif m = 5 Then
    MsgBox("May")
Elseif m = 6 Then
    MsgBox("June")
Elseif m = 7 Then
    MsgBox("July")
Elseif m = 8 Then
    MsgBox("August")
Elseif m = 9 Then
    MsgBox("September")
Elseif m = 10 Then
    MsgBox("October")
Elseif m = 11 Then
    MsgBox("November")
Elseif m = 12 Then
    MsgBox("December")
Else
    MsgBox("Invalid Input")
End If
```

```
End Sub
End Class
```

Output:



Experiment no. 16: WAP to print grade of students by using IF Else concept.

Code:

Public Class Form1

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

Dim marks As Single
marks = TextBox1.Text

If marks >= 90 Then
 TextBox2.Text = "Grade is A+"
Elseif marks >= 80 Then
 TextBox2.Text = "Grade is A"
Elseif marks >= 70 Then
 TextBox2.Text = "Grade is B+"
Elseif marks >= 60 Then
 TextBox2.Text = "Grade is B"
Elseif marks >= 50 Then
 TextBox2.Text = "Grade is C"
Elseif marks >= 40 Then


```

        TextBox2.Text = "Grade is D"
    Else
        TextBox2.Text = "Fail"
    End If

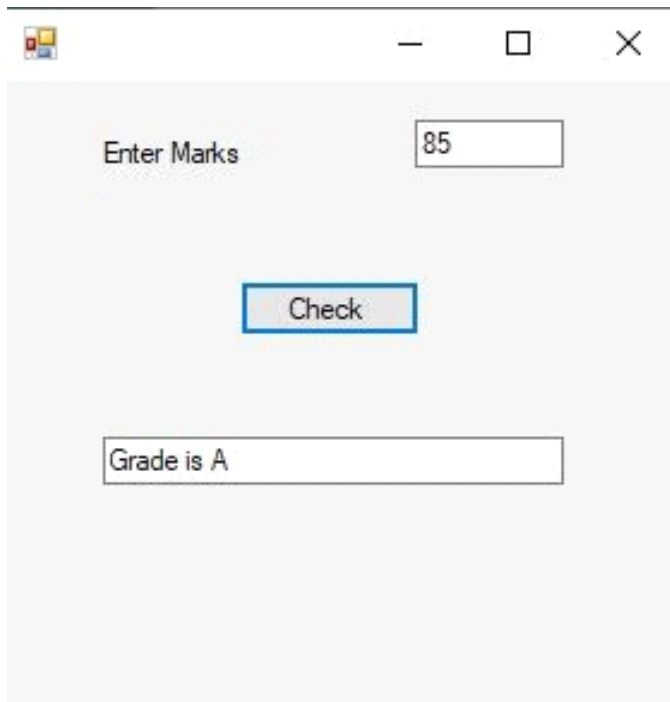
```

```

End Sub
End Class

```

Output:



The screenshot shows a Windows application window with a title bar containing a standard icon, a minus sign, a maximize button, and a close button. The window's content area has a light gray background. At the top left, the text 'Enter Marks' is displayed. To its right is a text input box containing the number '85'. Below this, centered, is a rectangular button with a blue border and the text 'Check'. At the bottom of the window is another text input box containing the text 'Grade is A'.

Experiment No. 17: WAP to design a simple calculator.

Code:

```
Public Class Form1
```

```

    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
        Handles Button1.Click
            Label1.Text = "+"
            Dim a, b, sum As Integer
            a = TextBox1.Text
            b = TextBox2.Text
            sum = a + b
            TextBox3.Text = sum

```

End Sub

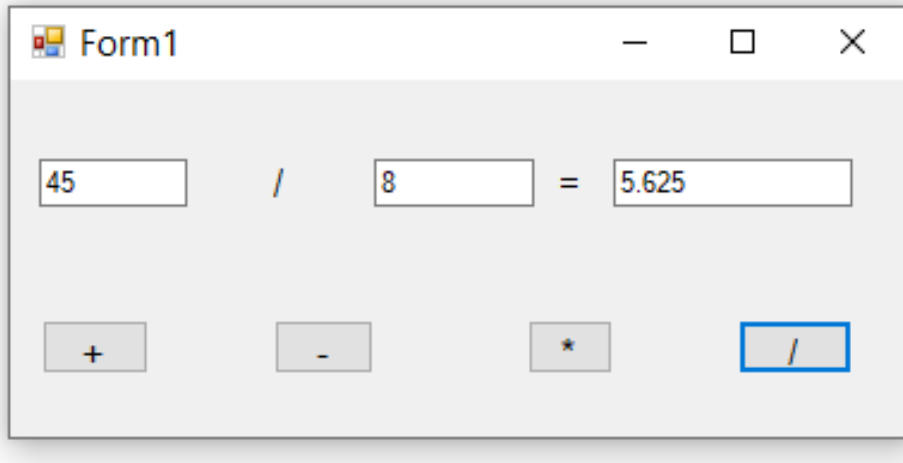
```
Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button2.Click
    Label1.Text = "-"
    Dim a, b, subs As Integer
    a = TextBox1.Text
    b = TextBox2.Text
    subs = a - b
    TextBox3.Text = subs
End Sub
```

```
Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button3.Click
    Label1.Text = "*"
    Dim a, b, mul As Integer
    a = TextBox1.Text
    b = TextBox2.Text
    mul = a * b
    TextBox3.Text = mul
End Sub
```

```
Private Sub Button4_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles Button4.Click
    Label1.Text = "/"
    Dim a, b, div As Double
    a = TextBox1.Text
    b = TextBox2.Text
    div = a / b
    TextBox3.Text = div
End Sub
```

End Class

Output:



Experiment no. 18: WAP to convert decimal number to binary, octal and hexadecimal number.

Code:

Public Class Form1

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

Dim dec, dec1, dec2, oct, hex, bin As Integer

Dim out, out1, out2 As String

dec = Val(TextBox1.Text)

out = ""

out1 = ""

out2 = ""

dec1 = dec

dec2 = dec

While dec1 > 0

bin = Fix(dec1) Mod 2

dec1 = Fix(dec1) / 2

out = bin & out

TextBox2.Text = Val(out)

End While

While dec2 > 0

oct = Fix(dec2) Mod 8

dec2 = Fix(dec2) / 8

```
out1 = oct & out1  
TextBox3.Text = Val(out1)
```

```
End While
```

```
While dec > 0
```

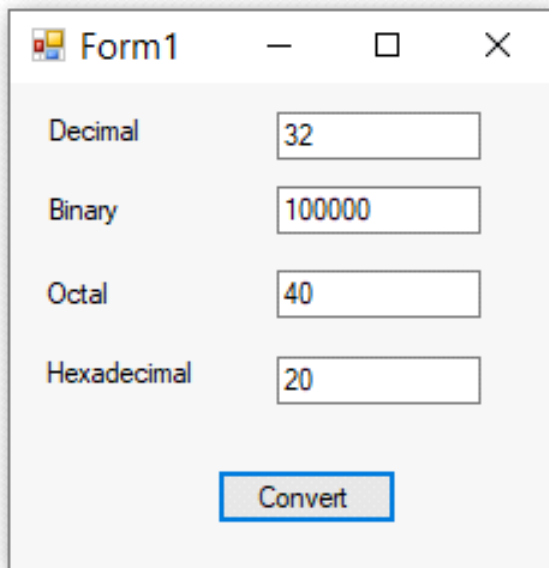
```
hex = Fix(dec) Mod 16  
dec = Fix(dec) / 16  
out2 = hex & out2  
TextBox4.Text = Val(out2)
```

```
End While
```

```
End Sub
```

```
End Class
```

Output:



The screenshot shows a Windows application window titled "Form1". Inside the window, there are four labels on the left: "Decimal", "Binary", "Octal", and "Hexadecimal". To the right of each label is a text box. The text boxes contain the following values: "32" for Decimal, "100000" for Binary, "40" for Octal, and "20" for Hexadecimal. At the bottom center of the form is a button labeled "Convert".

Input Type	Value
Decimal	32
Binary	100000
Octal	40
Hexadecimal	20

Experiment no. 19: WAP to calculate age based on todays date.

Code:

```
Public Class Form1
```

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

```
    Dim d1 As Date = DateTimePicker1.Value  
    Dim d2 As Date = DateTimePicker2.Value  
    Dim result As TimeSpan = d2.Subtract(d1)  
    Dim days As Integer = result.TotalDays  
    Dim years As Integer = days / 365
```

```
    TextBox1.Text = years.ToString + " Years"
```

```
End Sub  
End Class
```

Output:



Experiment No. 20: WAP to demonstrate GroupBox and RadioButton to show pizza price according to size.

Code:

```
Public Class Form1
```

```
    Private Sub RadioButton1_CheckedChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles RadioButton1.CheckedChanged
```

```
        TextBox1.Text = "99"  
    End Sub
```

```
    Private Sub RadioButton2_CheckedChanged(ByVal sender As System.Object, ByVal e As
```

```
System.EventArgs) Handles RadioButton2.CheckedChanged
```

```
    TextBox1.Text = "199"
```

```
End Sub
```

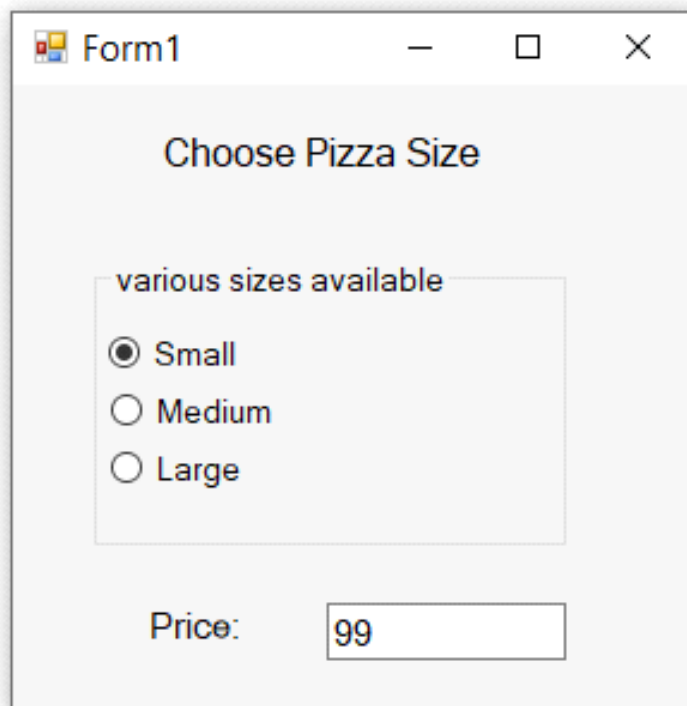
```
Private Sub RadioButton3_CheckedChanged(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles RadioButton3.CheckedChanged
```

```
    TextBox1.Text = "299"
```

```
End Sub
```

```
End Class
```

Output:



Experiment no. 21: WAP to select T-shirt colour using Radiobutton in Groupbox and display it in textbox.

Code:

```
Public Class Form1
```

```
Private Sub RadioButton1_CheckedChanged(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles RadioButton1.CheckedChanged
```

```
    TextBox1.Text = "You selected a Red coloured Tshirt"
```

```
End Sub
```

```
Private Sub RadioButton2_CheckedChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles RadioButton2.CheckedChanged
```

```
    TextBox1.Text = "You selected a Blue coloured Tshirt"
```

```
End Sub
```

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

```
    TextBox1.Text = "You selected a Green coloured Tshirt"
```

```
End Sub
```

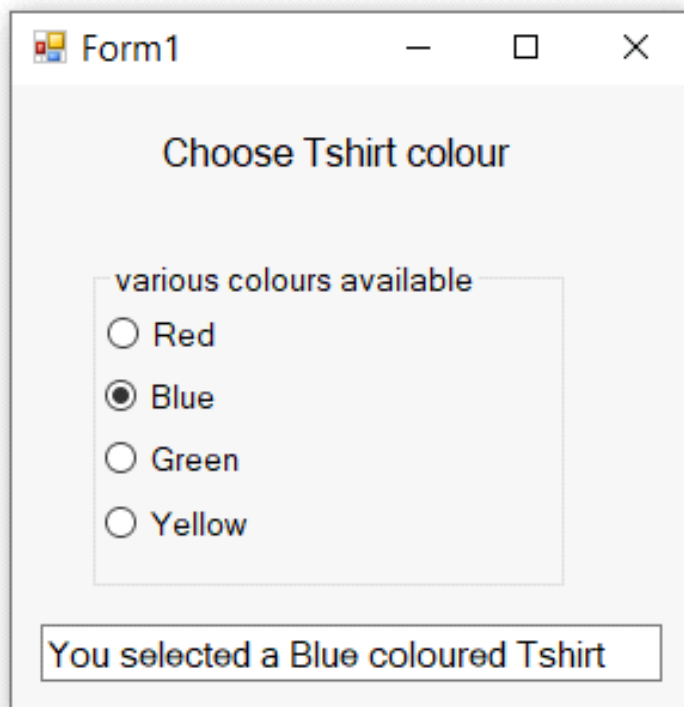
```
Private Sub RadioButton4_CheckedChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles RadioButton4.CheckedChanged
```

```
    TextBox1.Text = "You selected a Yellow coloured Tshirt"
```

```
End Sub
```

```
End Class
```

Output:



The screenshot shows a Windows application window titled "Form1". Inside the window, there is a label "Choose Tshirt colour". Below this label is a group box titled "various colours available". Inside the group box, there are four radio buttons: "Red", "Blue", "Green", and "Yellow". The "Blue" radio button is selected. Below the group box, there is a text box containing the text "You selected a Blue coloured Tshirt".