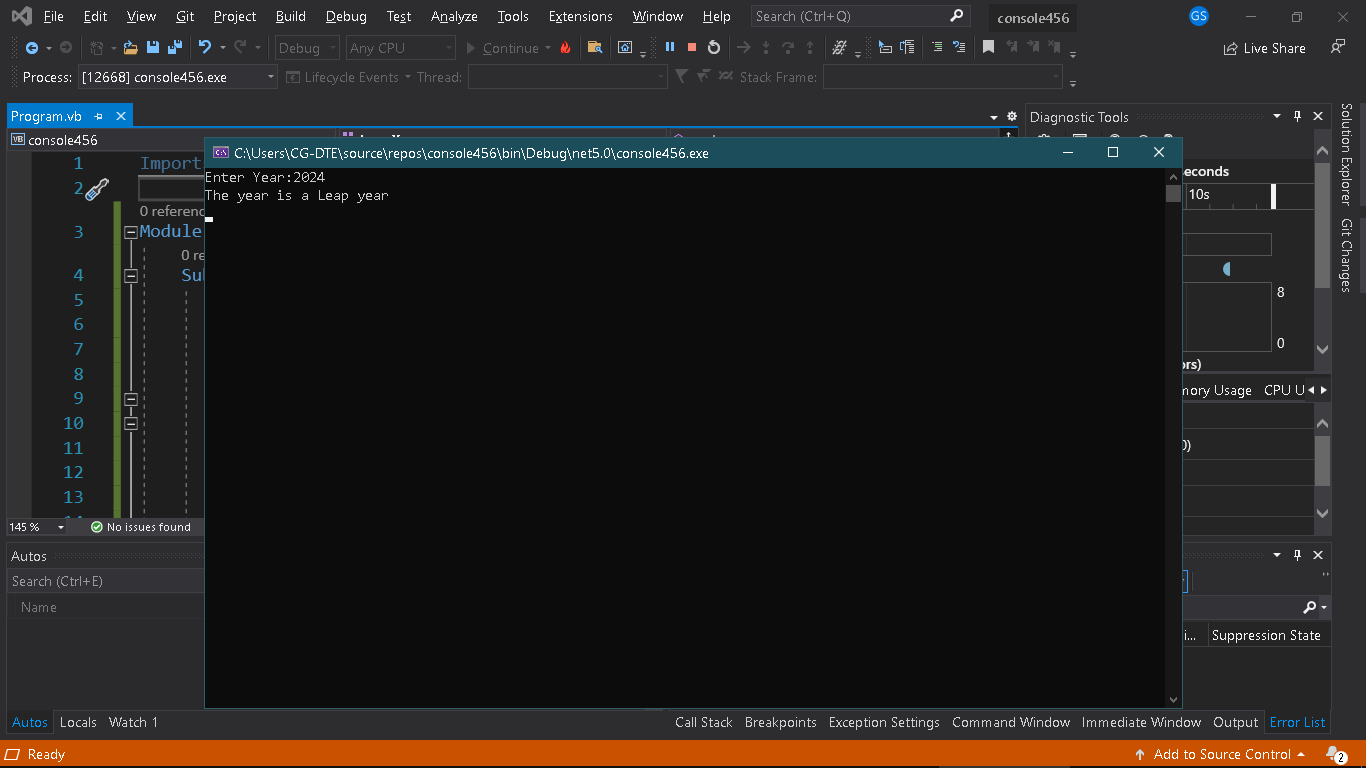
**OUTPUT-1**



**1) Write a program to check whether a year is leap year or not.**

**Code:**

Module LeapYear

Sub main()

Dim y As Integer

Console.Write("Enter Year:")

y = CInt(Console.ReadLine())

If y Mod 100 = 0 Then

If y Mod 400 = 0 Then

Console.WriteLine("The year is a Leap year")

Else

Console.WriteLine("The year is NOT a Leap year")

End If

Else

If y Mod 4 = 0 Then

Console.WriteLine("The year is a Leap year")

Else

Console.WriteLine("The year is NOT a Leap year")

End If

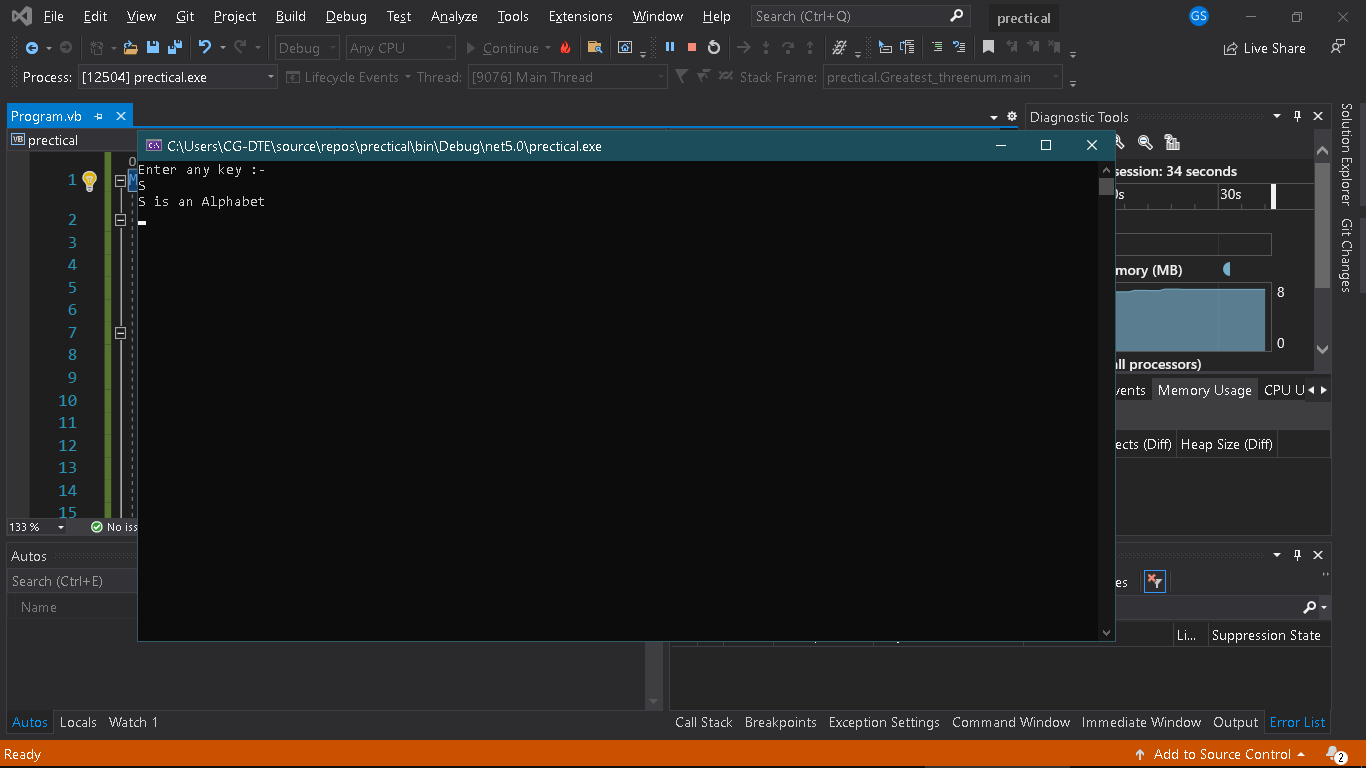
End If

Console.ReadLine()

End Sub

End Module

**OUTPUT-2**



**2) Write a program to check whether a character is alphabet or not.**

**Code:**

Module Alphabet

Sub Main()

Dim ch As Char

Console.WriteLine("Enter any key :-")

ch = Console.ReadLine()

Select Case ch

Case "a", "b", "c", "d", "e", "f", "g", "h", "i", "j", "k", "l", "m", "n", "o", "p", "q", "r", "s", "t", "u", "v", "w", "x", "y", "z", "A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", " Y", "Z"

Console.WriteLine("{0} is an Alphabet", ch)

Case Else

Console.WriteLine("{0} is NOT an Alphabet", ch)

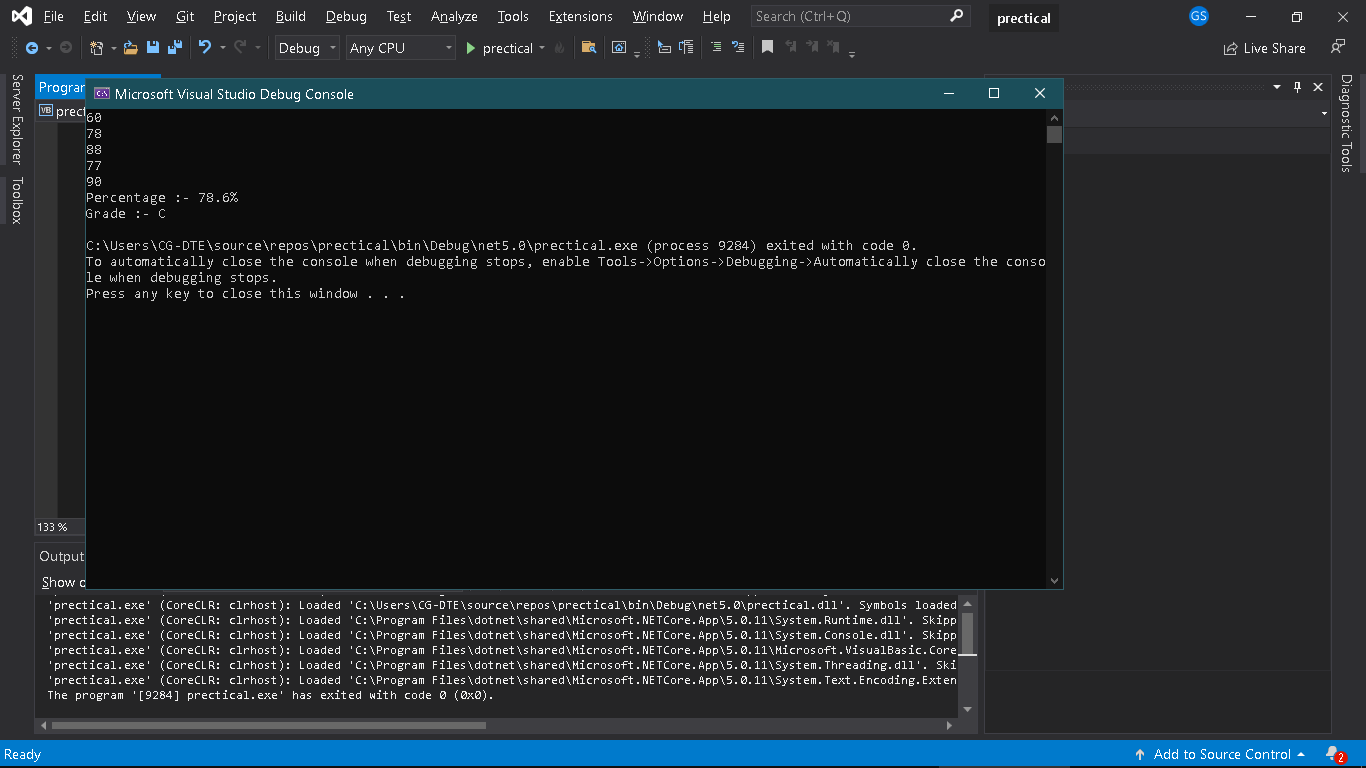
End Select

Console.ReadLine()

End Sub

End Module

**OUTPUT-3**



**3) Design an application to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:**

**Percentage>= 90% : Grade A**

**Percentage>= 80% : Grade B**

**Percentage>= 70% : Grade C**

**Percentage>= 60% : Grade D**

**Percentage>= 40% : Grade E**

**Percentage < 40% : Grade F**

**Code:**

Module Percnt

Sub Main()

Dim m1, m2, m3, m4, m5, per As Double

Dim g As Char

Console.WriteLine("Enter the marks obtained in 5 Subjects :- ")

m1 = Console.ReadLine()

m2 = Console.ReadLine()

m3 = Console.ReadLine()

m4 = Console.ReadLine()

m5 = Console.ReadLine()

per = (m1 + m2 + m3 + m4 + m5) / 5

Console.WriteLine("Percentage :- {0}%", per)

If (per >= 90) Then

g = "A"

ElseIf (per >= 80) Then

g = "B"

ElseIf (per >= 70) Then

g = "C"

ElseIf (per >= 60) Then

g = "D"

ElseIf (per >= 40) Then

g = "E"

Else

g = "F"

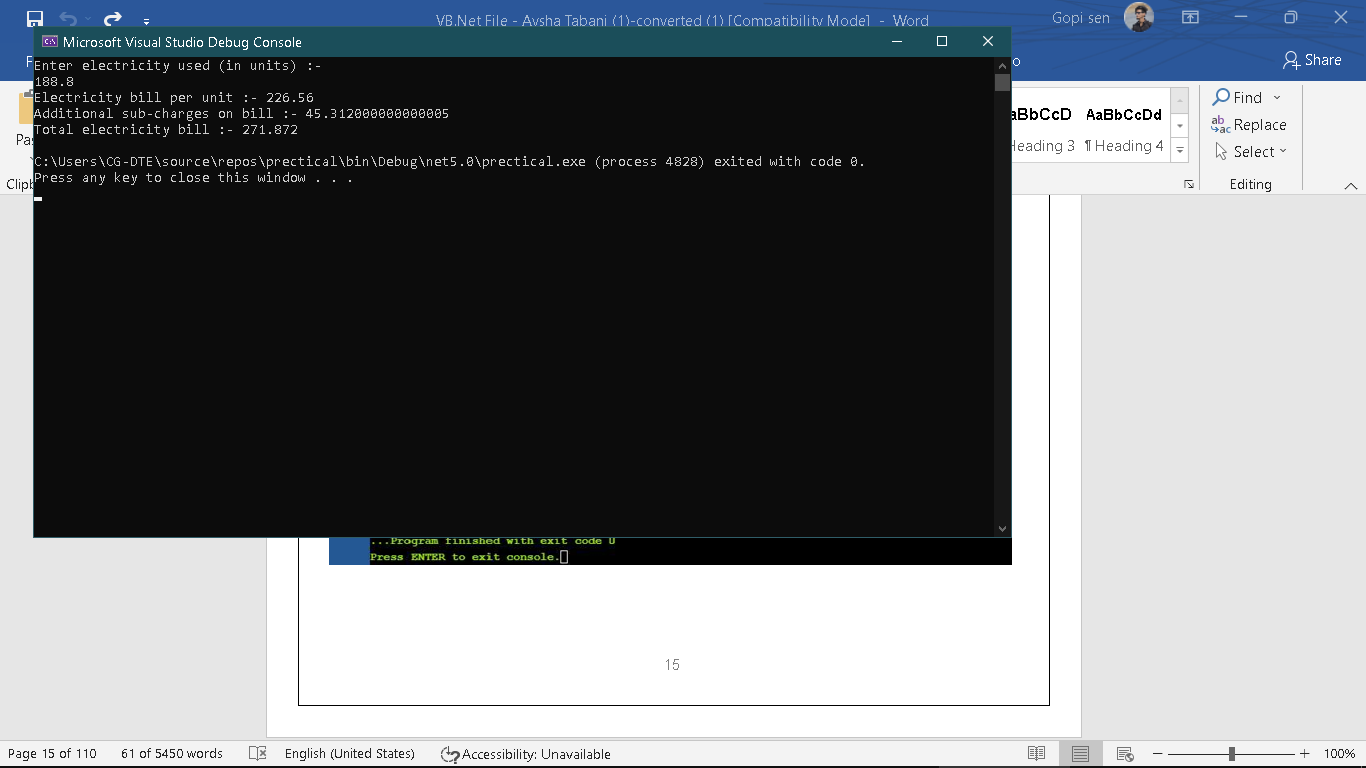
End If

Console.WriteLine("Grade :- {0}", g)

End Sub

End Module

**OUTPUT-4**



**4) Design an application to input electricity unit charges and calculate total electricity bill according to the given condition:**

**For first 50 units Rs. 0.50/unit**

**For next 100 units Rs. 0.75/unit**

**For next 100 units Rs. 1.20/unit**

**For unit above 250 Rs. 1.50/unit**

**Code:**

Module Elec\_Bill

Sub Main()

Dim un, r, a, e, total As Double

Console.WriteLine("Enter electricity used (in units) :- ")

un = Console.ReadLine()

If (un <= 50) Then

r = 0.5

ElseIf (un <= 150) Then

r = 0.75

ElseIf (un <= 250) Then

r = 1.2

Else

r = 1.5

End If

e = un \* r

a = e \* 0.2

total = e + a

Console.WriteLine("Electricity bill per unit :- {0}", e)

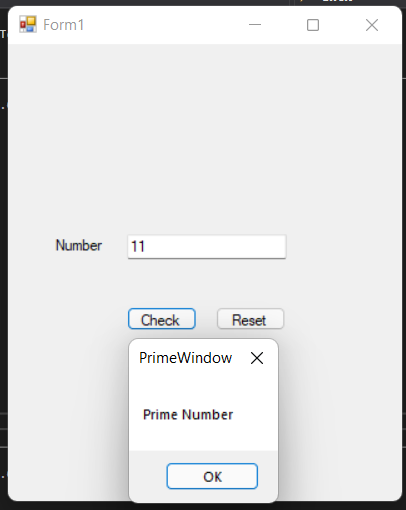
Console.WriteLine("Additional sub-charges on bill :- {0}", a)

Console.WriteLine("Total electricity bill :- {0}", total)

End Sub

End Module

**OUTPUT - 5**



**5) Design a form to check weather a number is prime or not by using input box and message box**.

**Code:**

Public Class Form1

Private Sub TextBox1\_TextChanged(sender As Object, e As EventArgs) Handles TextBox1.TextChanged

End Sub

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

Dim Number As Integer = CInt(TextBox1.Text)

Dim count As Integer = 0

For i As Integer = 1 To Number

If Number Mod i = 0 Then

count += 1

End If

Next

If count = 2 Then

MsgBox("Prime Number")

Else

MsgBox("Non prime Number")

End If

End Sub

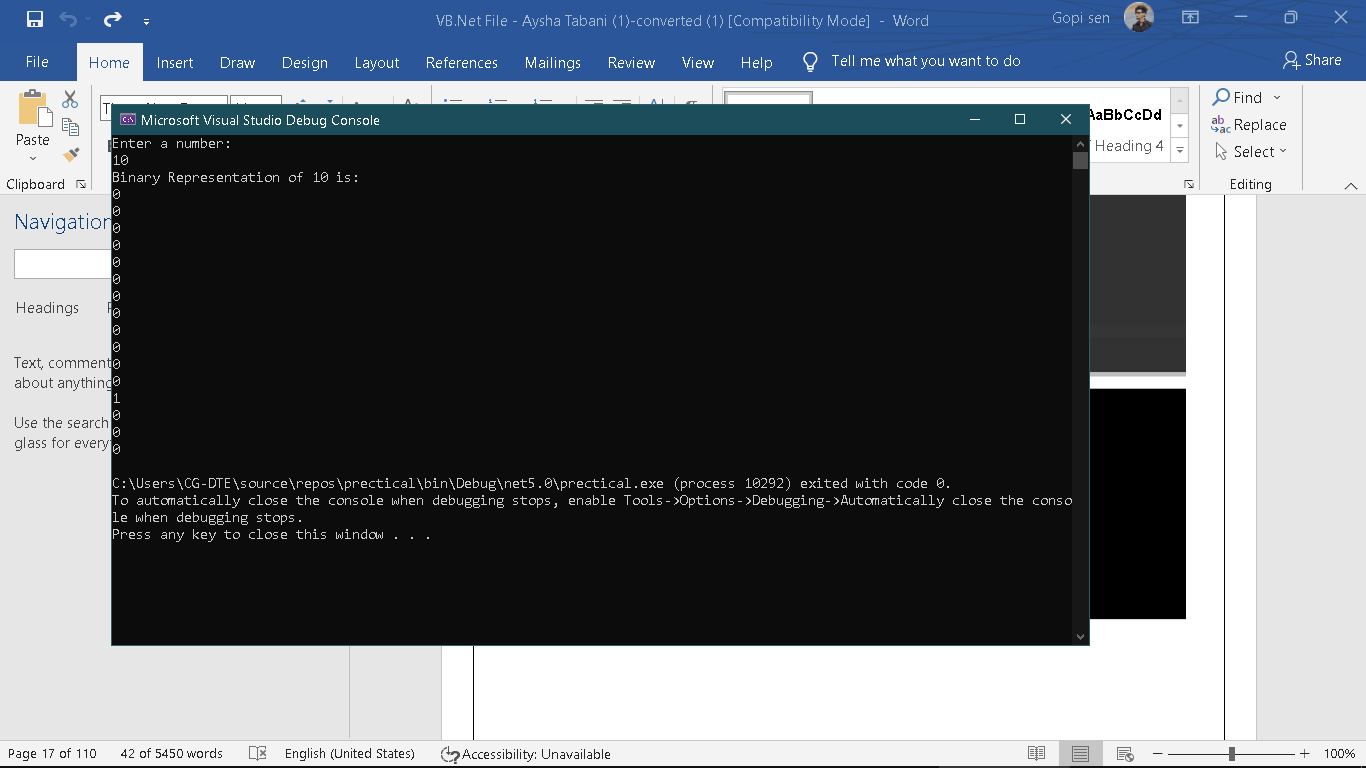
Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

TextBox1.Text = ""

End Sub

End Class

**OUTPUT-6**



**6) Write a program to convert decimal to binary number system using bitwise operator.**

**Code:**

Module Binary

Sub Main()

Dim n, i, b As Integer

Console.WriteLine("Enter a number:")

n = Console.ReadLine()

Console.writeline("Binary Representation of {0} is:",n)

For i = 15 To 0 Step -1

b = n >> i

If (b = 1) Then

Console.WriteLine("1")

Else

Console.WriteLine("0")

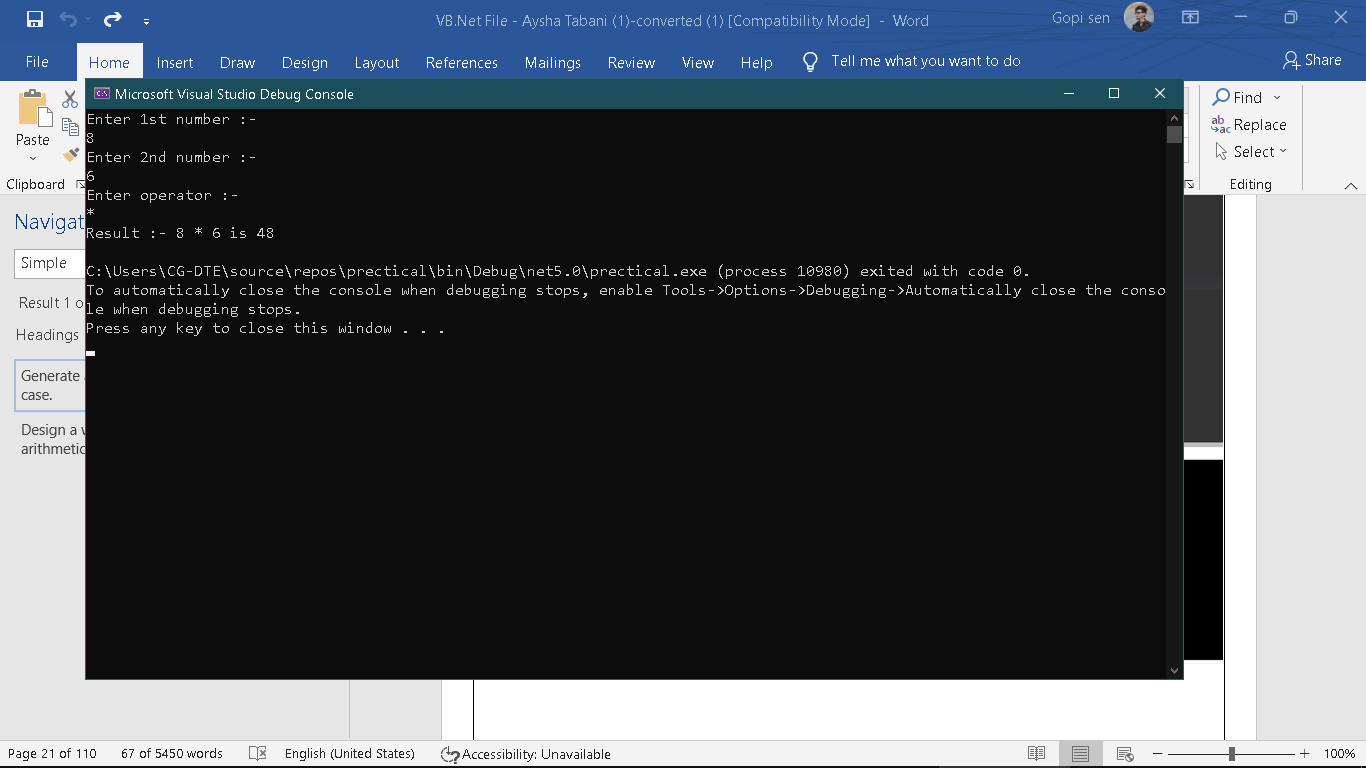
End If

Next

End Sub

End Module

**OUTPUT-7**



**7) Write a program to create Simple Calculator using select case.**

**Code:**

Module Calculator

Sub Main()

Dim a, b, c As Integer

Dim op As Char

Console.WriteLine("Enter 1st number :- ")

a = Console.ReadLine()

Console.WriteLine("Enter 2nd number :- ")

b = Console.ReadLine()

Console.WriteLine("Enter operator :- ")

op = Console.ReadLine()

Select Case op

Case "+"

c = a + b

Case "-"

c = a - b

Case "\*"

c = a \* b

Case "\"

c = a \ b

Case Else

Console.WriteLine("You have entered a wrong operator")

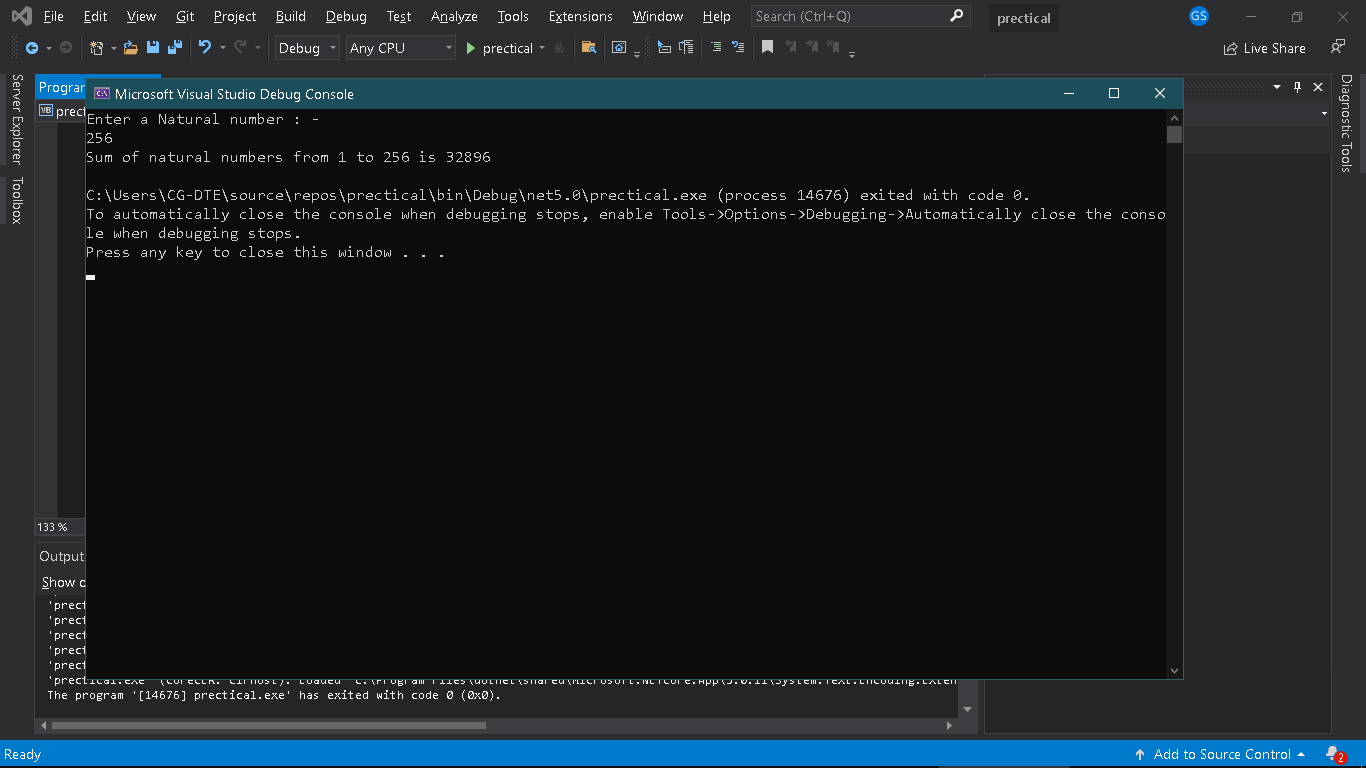
End Select

Console.WriteLine("Result :- {0} {1} {2} is {3}", a, op, b, c)

End Sub

End Module

**OUTPUT-8**



**8) Write a program to find sum of all natural numbers between 1 to n .**

**Code:** -

Module Natural

Sub Main()

Dim a, i, s As Integer

s = 0

Console.WriteLine("Enter a Natural number : -")

a = Console.ReadLine()

If (a > 0) Then

For i = 1 To a Step 1

s = s + i

Next

Console.WriteLine("Sum of natural numbers from 1 to {0} is {1}", a, s)

Else

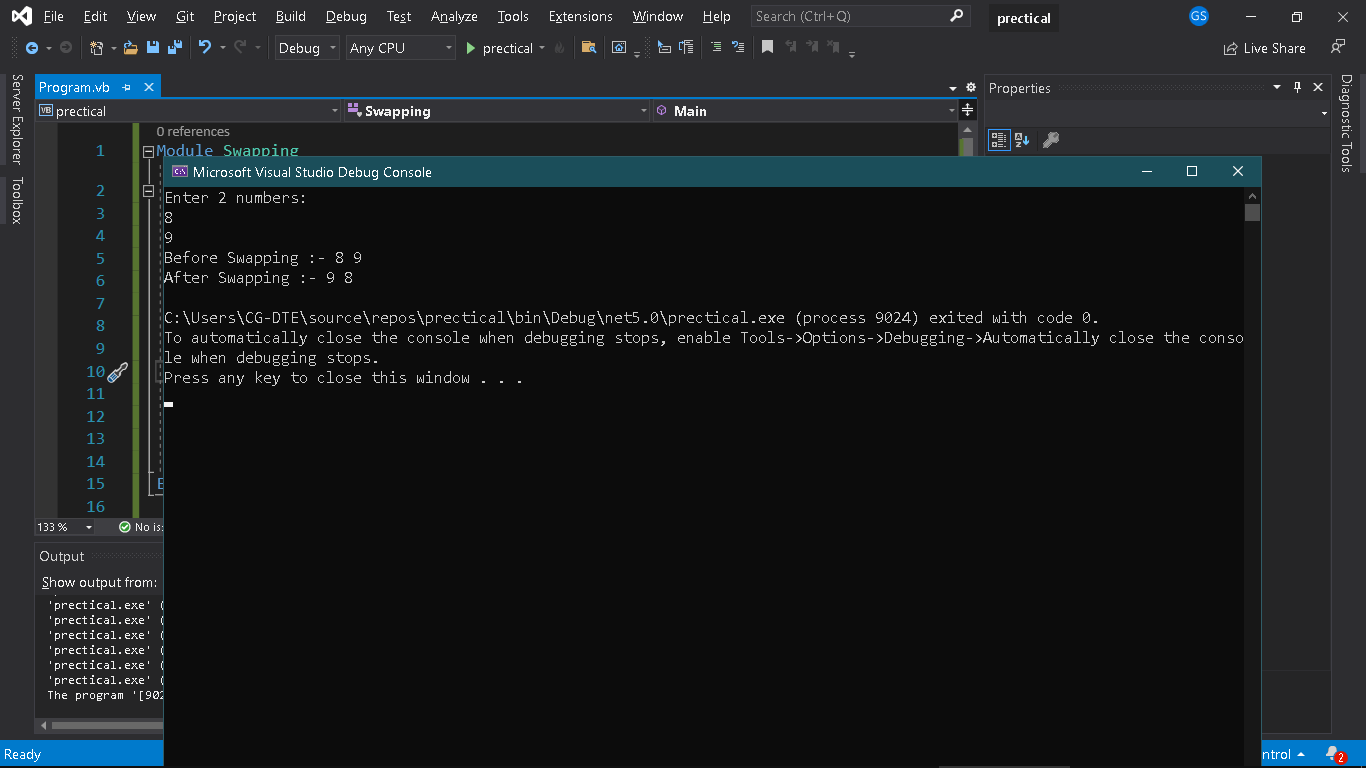
Console.WriteLine("Entered Number is not an integer")

End If

End Sub

End Module

**OUTPUT-9**



1. **Write a program to swap two numbers using bitwise operator**

**Code:-**

Module Swapping

Sub Main()

Dim num1, num2 As Integer

Console.WriteLine("Enter 2 numbers:")

num1 = Console.ReadLine()

num2 = Console.ReadLine()

Console.writeline("Before Swapping :- {0} {1}",num1,num2)

num1 = num1 Xor num2

num2 = num1 Xor num2

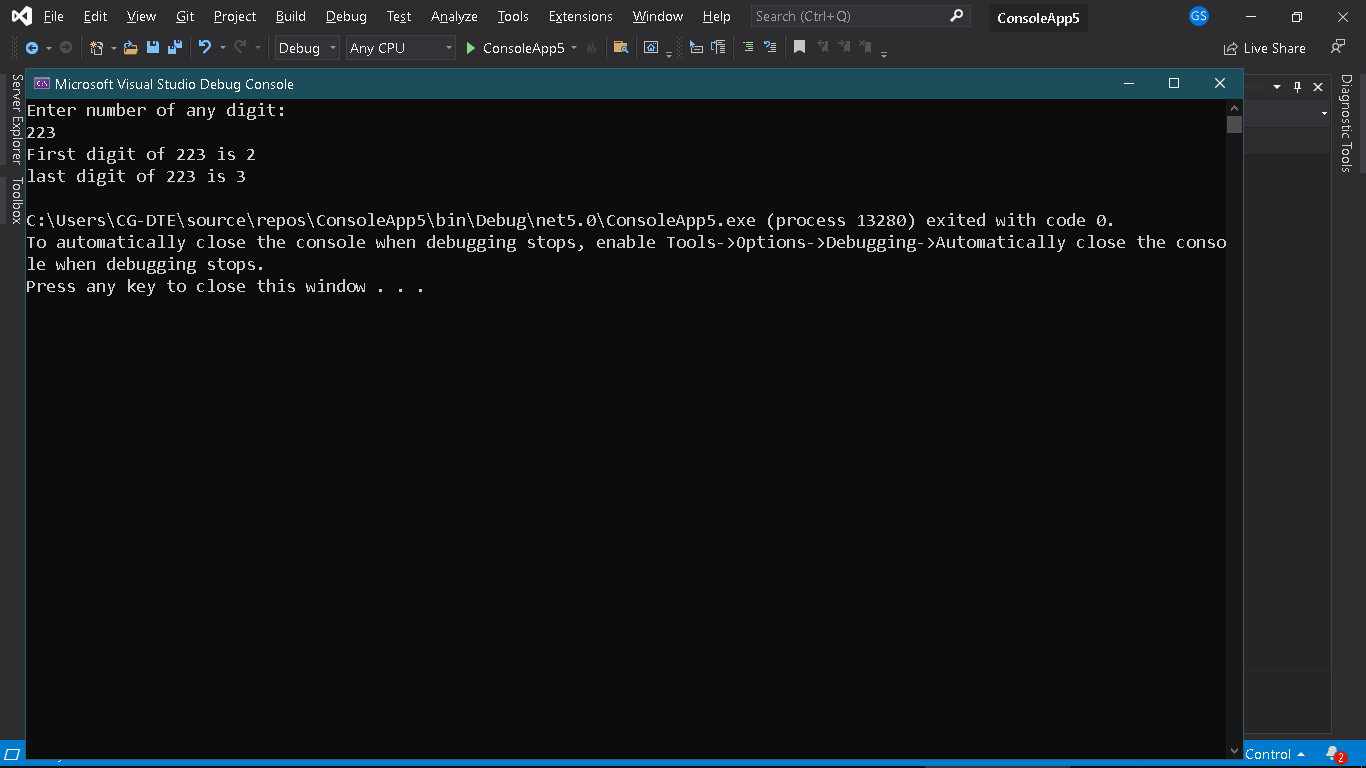
num1 = num1 Xor num2

Console.WriteLine("After Swapping :- {0} {1}", num1, num2)

End Sub

End Module

**OUTPUT-10**



1. **Write a program to find first and last digit of any number.**

**Code:-**

Module Digit

Sub Main()

Dim n, f, l As Integer

Console.WriteLine("Enter number of any digit:")

n = Console.ReadLine()

f = n

While (f >= 10)

f = f \ 10

End While

Console.WriteLine("First digit of {0} is {1}", n, f)

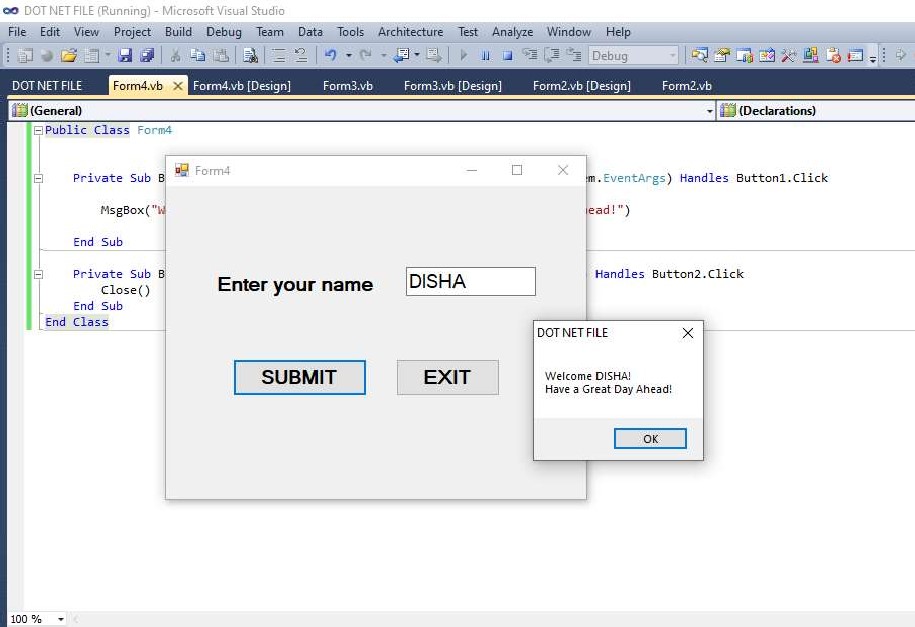
l = n Mod 10

Console.WriteLine("last digit of {0} is {1}", n, l)

End Sub

End Module

**OUTPUT-11**



1. **Design an application for displaying welcome message.**

**Code:-**

Public Class Form4

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

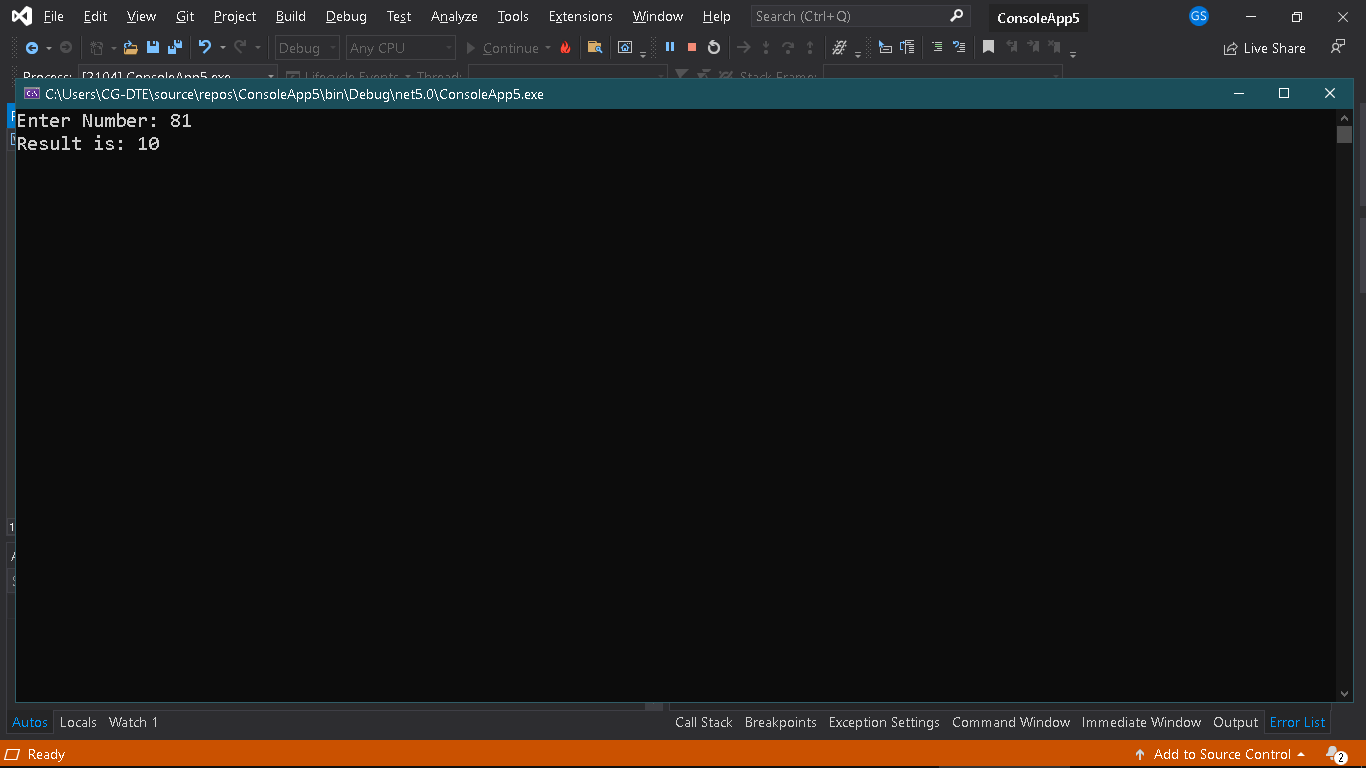
MsgBox("Welcome " & TextBox1.Text + "!" + vbLf + "Have a Great Day Ahead!") End Sub

Private Sub Button2\_Click(sender As System.Object, e As System.EventArgs) Handles Button2.Click

Close() End Sub

End Class

**OUTPUT-12**



1. **Write a program using shift operator.**

**Code:-**

Module Module1

Sub Main()

Dim num As Integer = 0

Dim res As Integer = 0

Console.Write("Enter Number: ")

num = Integer.Parse(Console.ReadLine())

res = num >> 3

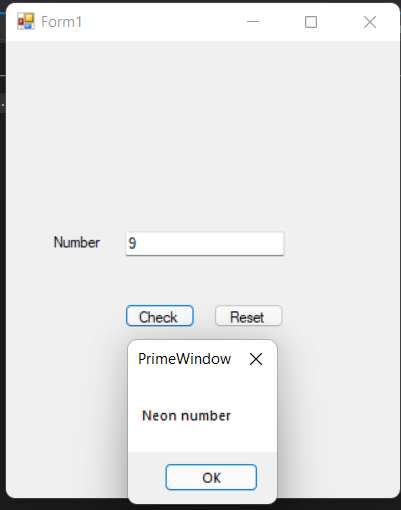
Console.Write("Result is: {0}", res)

Console.ReadLine()

End Sub

End Module

**OUTPUT-13**



1. **WAP to check whether given number is neon or not using user define function.**

**Code:-**

Public Class Form1

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

Dim n As Integer = CInt(TextBox1.Text)

Dim square As Integer = n \* n

Dim sum As Integer = 0

Dim m As String = "Neon number"

Dim nn As String = "Not neon number"

While square <> 0

Dim digit As Integer = square Mod 10

sum = sum + digit

square = square \ 10

End While

If (n = sum) Then

MsgBox(m)

Else

MsgBox(nn)

End If

End Sub

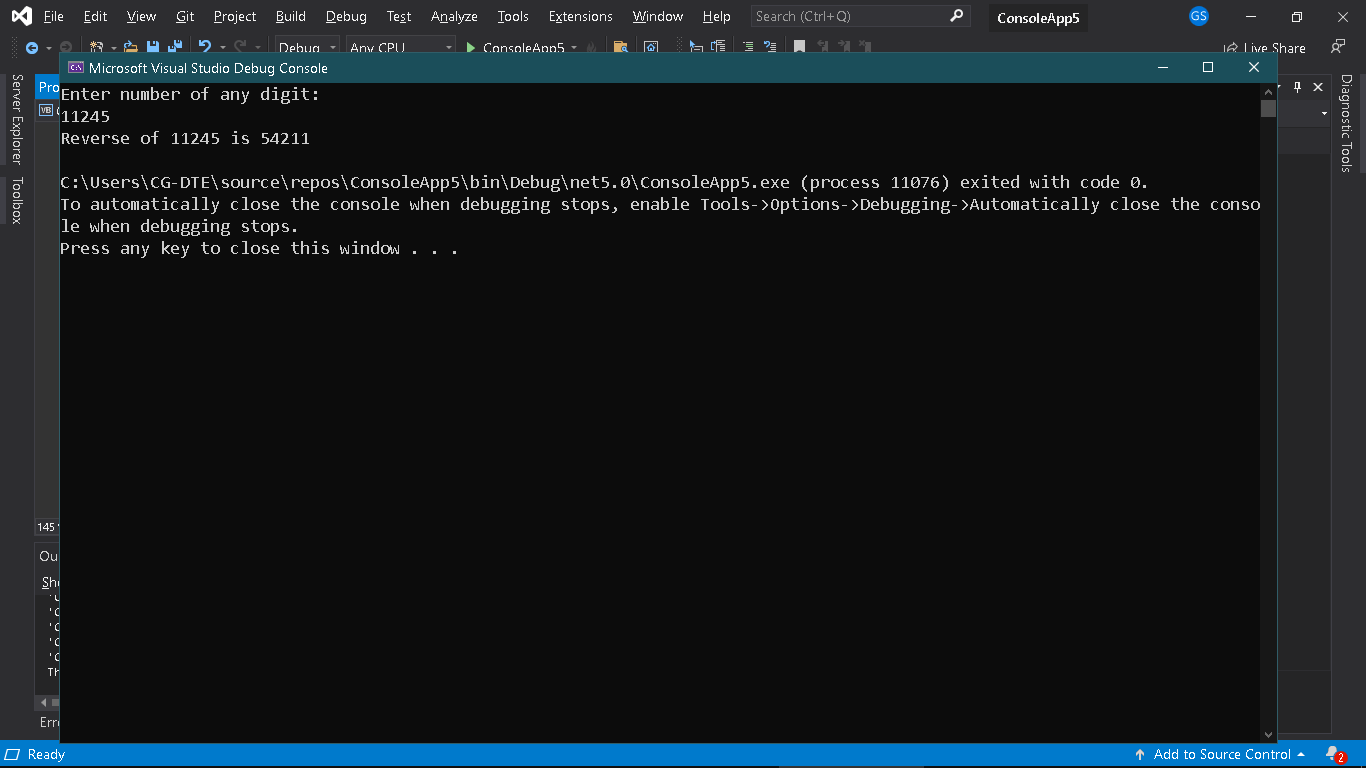
Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

TextBox1.Text = ""

End Sub

End Class

**OUTPUT-14**



1. **Write a program to enter any number and print its reverse**.

**Code:-**

Module Reverse

Sub Main()

Dim n, m, r, u As Integer

Console.WriteLine("Enter number of any digit:")

n = Console.ReadLine()

u = n

While (n <> 0)

m = n Mod 10

r = r \* 10 + m

n = n \ 10

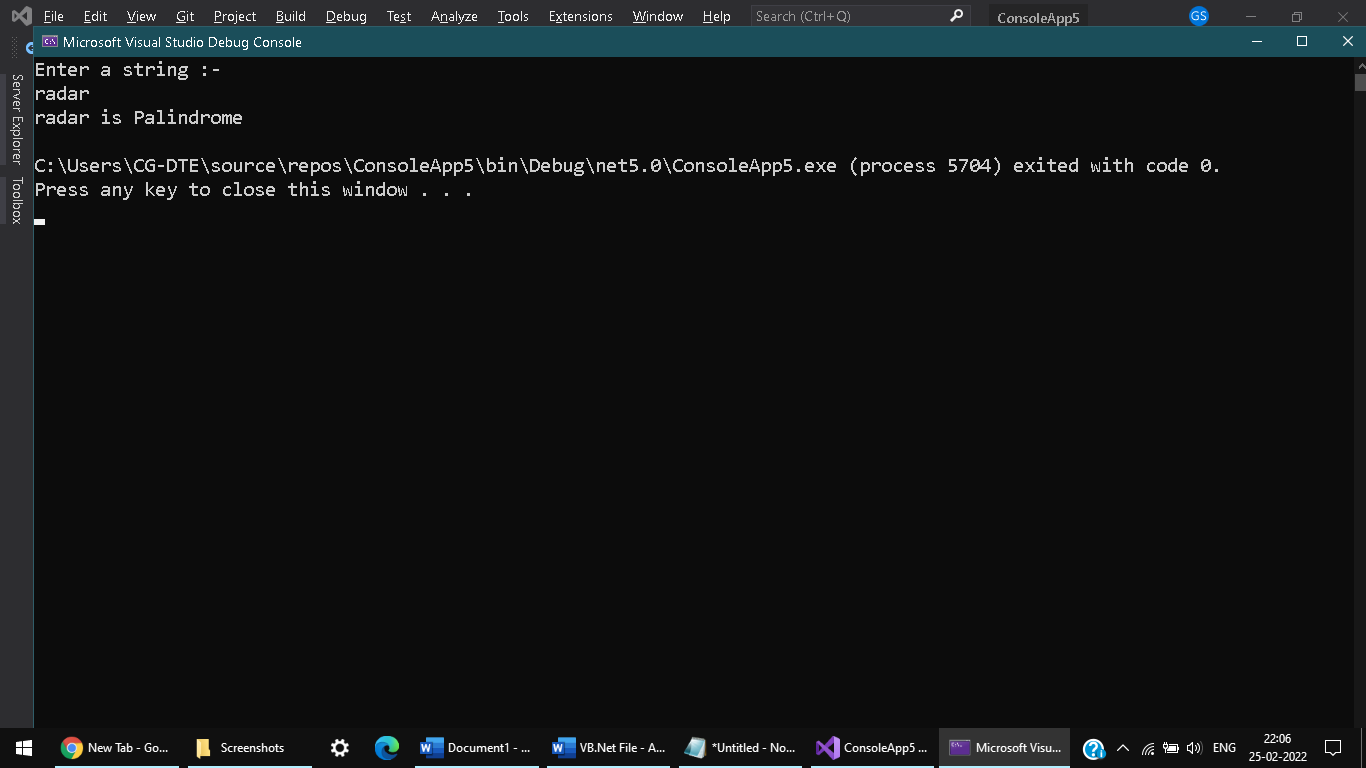
End While

Console.WriteLine("Reverse of {0} is {1}", u, r)

End Sub

End Module

**OUTPUT-15**



1. **) Write a program to enter any number and check whether the number is palindrome or not.**

**Code:-**

Module Palindrome

Sub Main()

Dim str1, str2 As String

Console.WriteLine("Enter a string :- ")

str1 = Console.ReadLine()

str2 = StrReverse(str1)

If str2.Equals(str1) Then

Console.WriteLine("{0} is Palindrome", str1)

Else

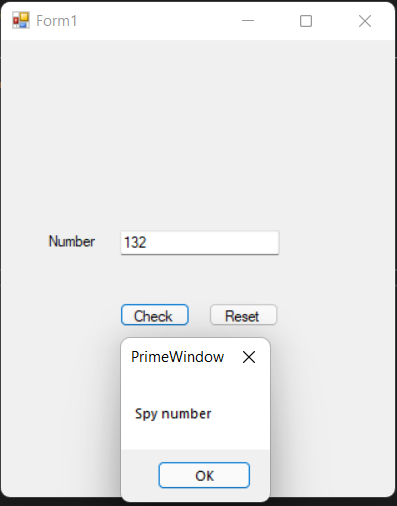
Console.WriteLine("Not Palindrome")

End If

End Sub

End Module

**OUTPUT-16**



1. **WAP to check whether a given number is spy number or not.**

**Code:-**

Public Class Form1

Private Sub TextBox1\_TextChanged(sender As Object, e As EventArgs) Handles TextBox1.TextChanged

End Sub

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

Dim num As Integer = CInt(TextBox1.Text)

Dim product As Integer = 1

Dim sum As Integer = 0, lastdigit As Integer

Dim m As String = "Spy number"

Dim nn As String = "Not spy number"

While num > 0

lastdigit = num Mod 10

sum = sum + lastdigit

product = product \* lastdigit

num = num \ 10

End While

If (product = sum) Then

MsgBox(m)

Else

MsgBox(nn)

End If

End Sub

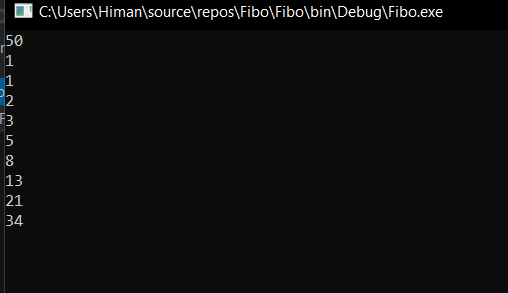
Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

TextBox1.Text = ""

End Sub

End Class

**OUTPUT-17**



1. **Write a program to print Fibonacci series up to n terms.**

**Code:-**

Module Module1

Sub Main()

Dim n1 As Integer

Dim n2 As Integer

Dim n As Integer = Console.ReadLine()

n1 = 1

n2 = 1

Console.WriteLine("{0}", n1)

While n2 < n

Console.WriteLine(n2)

n2 = n2 + n1

n1 = n2 - n1

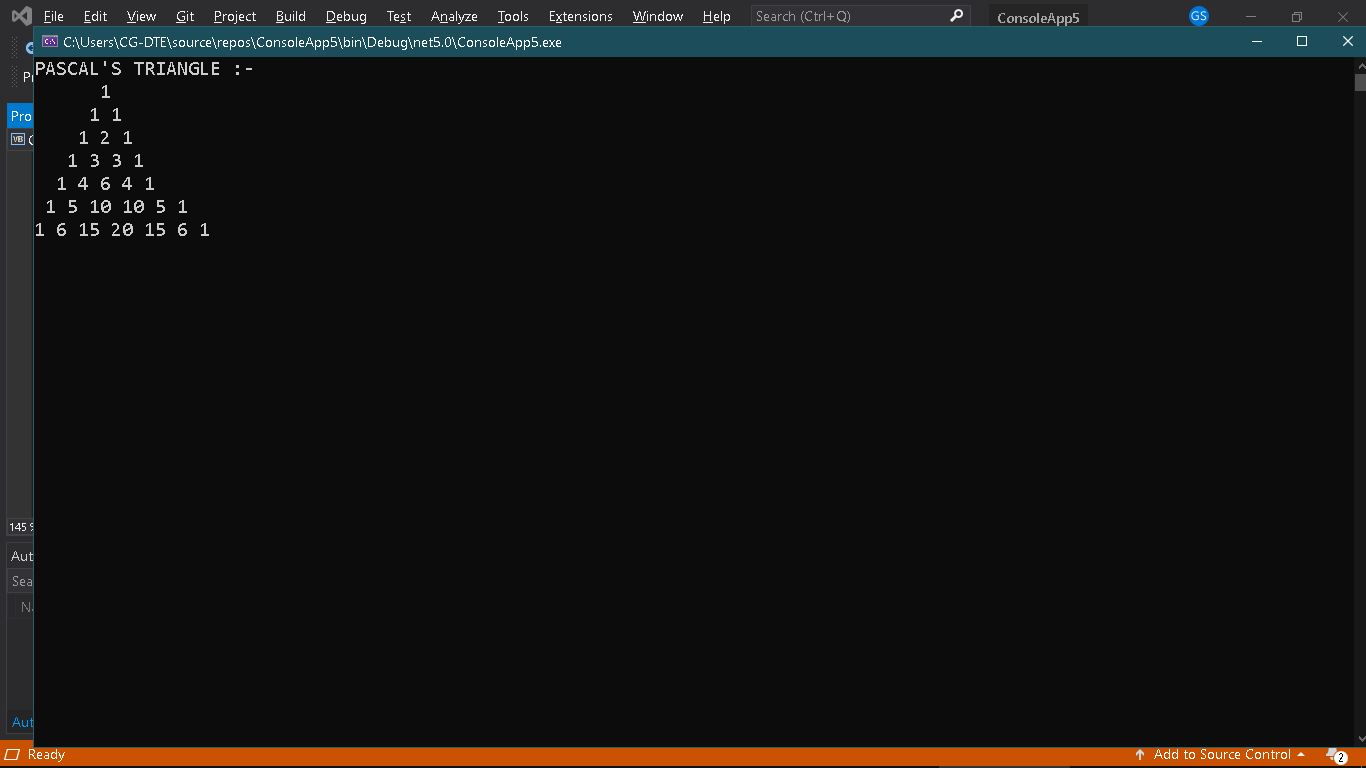
End While

Console.ReadLine()

End Sub

End Module

**OUTPUT-18**



1. **Write a program to print Pascal triangle up to n rows.**

**Code:-**

Module Pascal

Sub Main()

Dim arr As Integer(,) = New Integer(7, 7) {}

Console.Write("PASCAL'S TRIANGLE :-")

For i As Integer = 0 To 7

For k As Integer = 7 To i + 1 Step -1 'print spaces

Console.Write(" ")

Next

For j As Integer = 0 To i - 1

If j = 0 OrElse i = j Then

arr(i, j) = 1

Else

arr(i, j) = arr(i - 1, j) + arr(i - 1, j - 1)

End If

Console.Write(arr(i, j) & " ")

Next

Console.WriteLine()

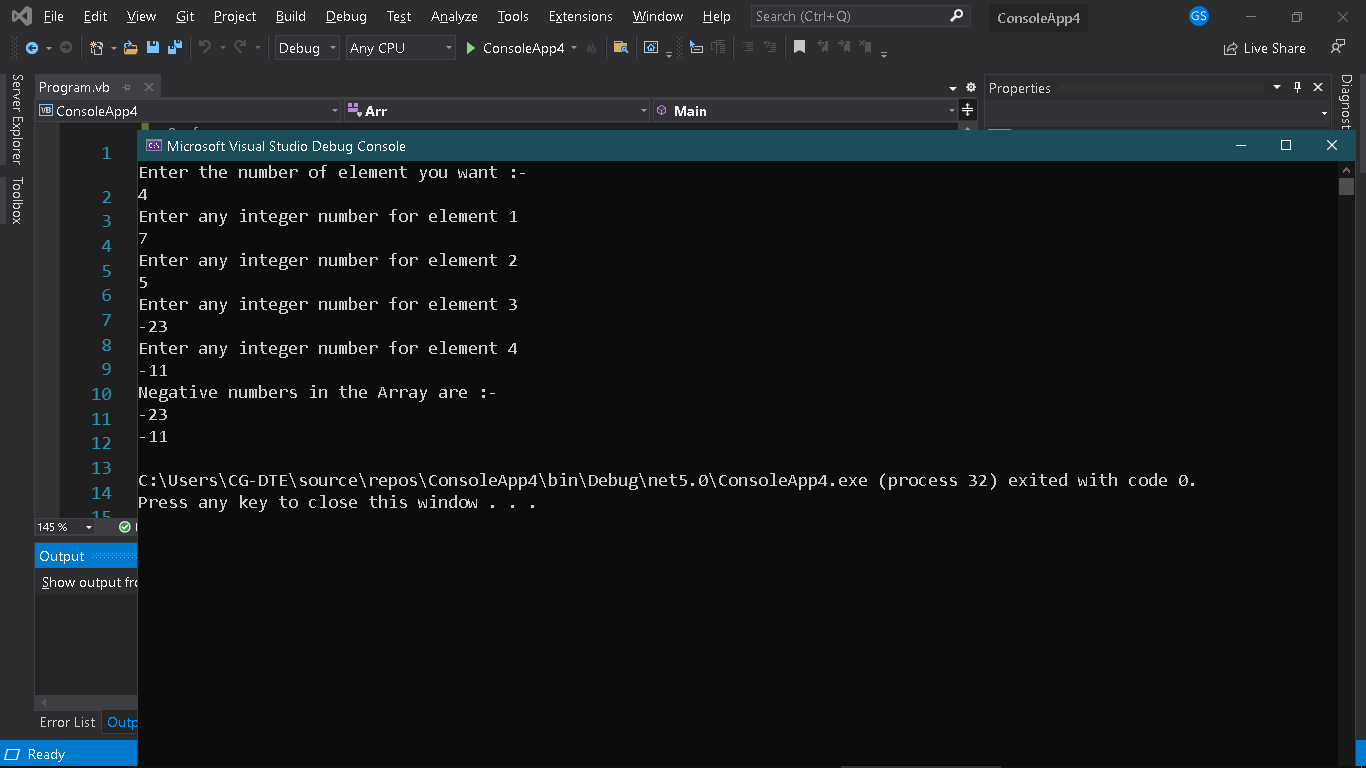
Next

Console.ReadLine()

End Sub

End Module

**OUTPUT-19**



1. **Write a program to print all negative elements in an array.**

**Code:-**

Module Arr

Sub Main()

Dim m(100), i, n As Integer

Console.WriteLine("Enter the number of element you want :-")

n = Console.ReadLine()

For i = 1 To n

Console.WriteLine("Enter any integer number for element {0}", i)

m(i) = Console.ReadLine()

Next

console.writeline("Negative numbers in the Array are :- ")

For i = 1 To n

If (m(i) < 0) Then

Console.WriteLine("{0}", m(i))

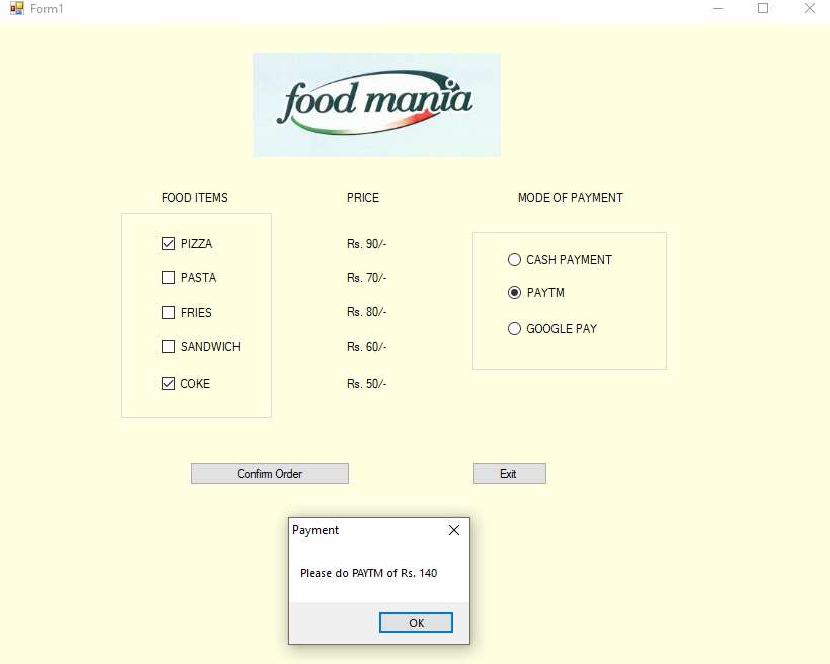
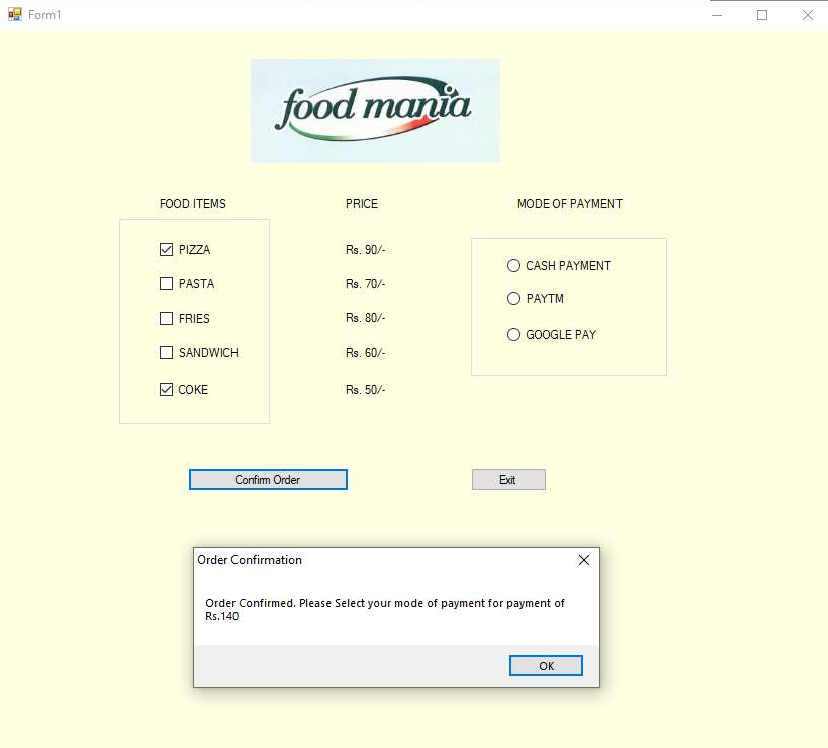
End If

Next

End Sub

End Module

# OUTPUT – 20



**20) Create an application that offers various food items to select from check boxes and a mode of payment using radio button. It then display the total amount payable.**

**Code:-**

Public Class Form1 Dim sum As Integer Dim a As Integer

Private Sub Form1\_Load(sender As System.Object, e As System.EventArgs) Handles MyBase.Load

sum = 0

a = 0 End Sub

Private Sub CheckBox1\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles CheckBox1.CheckedChanged

If CheckBox1.Checked = True Then a = 90

sum = sum + 90 End If

End Sub

Private Sub CheckBox2\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles CheckBox2.CheckedChanged

If CheckBox2.Checked = True Then a = 70

sum = sum + 70 End If

End Sub

Private Sub CheckBox3\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles CheckBox3.CheckedChanged

If CheckBox3.Checked = True Then a = 80

sum = sum + 80 End If

End Sub

Private Sub Button1\_Click(sender As System.Object, e As System.EventArgs) Handles Button1.Click

MsgBox("Order Confirmed. Please Select your mode of payment for payment of Rs." & sum)

End Sub

Private Sub CheckBox4\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles CheckBox4.CheckedChanged

If CheckBox4.Checked = True Then a = 60

sum = sum + 60 End If

End Sub

Private Sub CheckBox5\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles CheckBox5.CheckedChanged

If CheckBox5.Checked = True Then a = 50

sum = sum + 50 End If

End Sub

Private Sub RadioButton1\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles RadioButton1.CheckedChanged

MsgBox("Please Make Cash Payment of Rs. " & sum) End Sub

Private Sub RadioButton2\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles RadioButton2.CheckedChanged

MsgBox("Please do PAYTM of Rs. " & sum) End Sub

Private Sub RadioButton3\_CheckedChanged(sender As System.Object, e As System.EventArgs) Handles RadioButton3.CheckedChanged

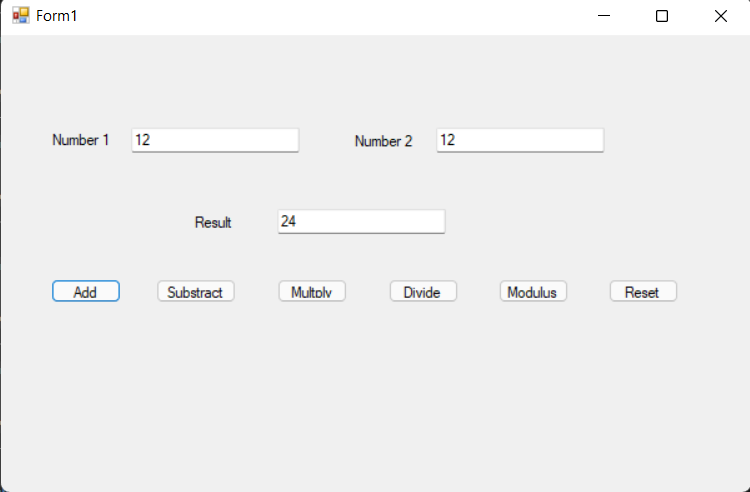
MsgBox("Please Make Google Pay Payment of Rs. " & sum) End Sub

Private Sub Button2\_Click(sender As System.Object, e As System.EventArgs) Handles Button2.Click

Close() End Sub

End Class

**OUTPUT-21**



1. **Design a window application for simple arithmetic operations.**

**Code:-**

Public Class Form1

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

Dim x As Integer = CInt(TextBox1.Text)

Dim y As Integer = CInt(TextBox2.Text)

TextBox3.Text = x + y

End Sub

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

Dim x As Integer = CInt(TextBox1.Text)

Dim y As Integer = CInt(TextBox2.Text)

TextBox3.Text = x - y

End Sub

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

Dim x As Integer = CInt(TextBox1.Text)

Dim y As Integer = CInt(TextBox2.Text)

TextBox3.Text = x \* y

End Sub

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

Dim x As Integer = CInt(TextBox1.Text)

Dim y As Integer = CInt(TextBox2.Text)

TextBox3.Text = x \ y

End Sub

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

Dim x As Integer = CInt(TextBox1.Text)

Dim y As Integer = CInt(TextBox2.Text)

TextBox3.Text = x Mod y

End Sub

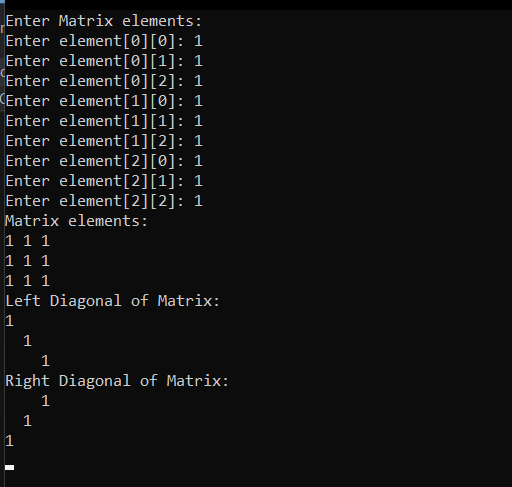
Private Sub Button6\_Click(sender As Object, e As EventArgs) Handles Button6.Click

TextBox3.Text = ""

End Sub

End Class

**OUTPUT-22**



**22) Write a program to create 2 D array, Insert element into array and display elements in matrix form and also display forward and back word diagonal of matrix.**

**Code:-**

Module Module1

Sub Main()

Dim arr(,) As Integer = New Integer(3, 3) {}

Console.WriteLine("Enter Matrix elements: ")

For i = 0 To 2 Step 1

For j = 0 To 2 Step 1

Console.Write("Enter element[{0}][{1}]: ", i, j)

arr(i, j) = Integer.Parse(Console.ReadLine())

Next

Next

Console.WriteLine("Matrix elements: ")

For i = 0 To 2 Step 1

For j = 0 To 2 Step 1

Console.Write("{0} ", arr(i, j))

Next

Console.WriteLine()

Next

Console.WriteLine("Left Diagonal of Matrix: ")

For i = 0 To 2 Step 1

For j = 0 To 2 Step 1

If (i = j) Then

Console.Write("{0} ", arr(i, j))

Else

Console.Write(" ")

End If

Next

Console.WriteLine()

Next

Console.WriteLine("Right Diagonal of Matrix: ")

For i = 0 To 2 Step 1

For j = 0 To 2 Step 1

If (i + j = 2) Then

Console.Write("{0} ", arr(i, j))

Else

Console.Write(" ")

End If

Next

Console.WriteLine()

Next

Console.ReadLine()

End Sub

End Module

**OUTPUT-23**



**23)** **Write a program to sort an array.**

**Code:**

Module Module1

Sub Main()

Dim Array As Integer()

Dim arrayItem As Integer

Array = {7, 3, 5, 8, 9, 2, 7}

Console.WriteLine("Array before sorting")

Console.WriteLine()

Console.Write("(")

For Each arrayItem In Array

Console.Write(arrayItem)

Console.Write(",")

Next

Console.Write(")")

Console.WriteLine()

Console.WriteLine()

For i = 0 To Array.Length - 1

Dim current As Integer = Array(i)

Dim j As Integer = i - 1

While j >= 0

If Array(j) > current Then

Array(j + 1) = Array(j)

j = j - 1

Else

Exit While

End If

End While

Array(j + 1) = current

Next

Console.WriteLine("Array after sorting")

Console.WriteLine()

Console.Write("(")

For Each arrayItem In Array

Console.Write(arrayItem)

Console.Write(",")

Next

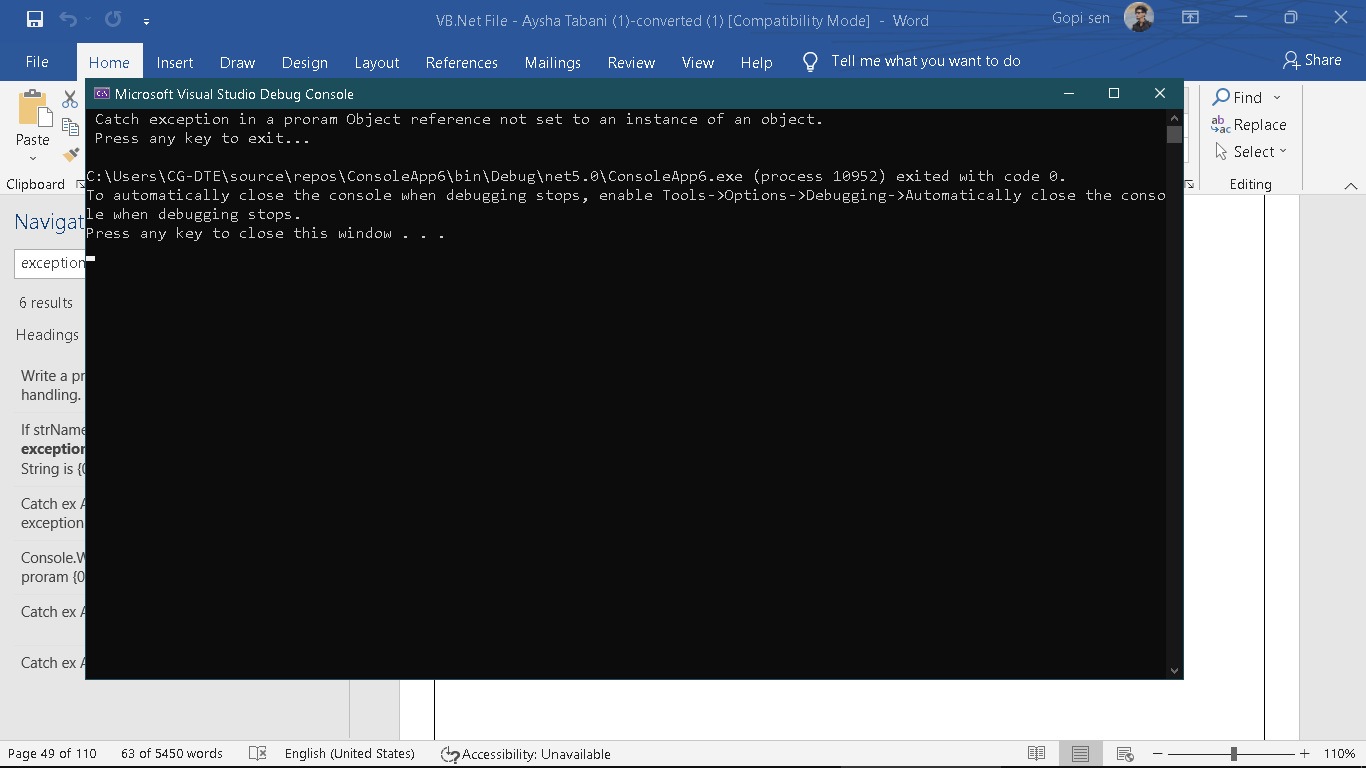
Console.Write(")")

Console.ReadLine()

End Sub

End Module

**OUTPUT-24**



**24) Write a program to illustrate exception handling.**

**Code;-**

Module Try\_catch

Sub Main(ByVal args As String())

Dim strName As String = Nothing

Try

If strName.Length > 0 Then

Console.WriteLine(" Name of String is {0}", strName)

End If

Catch ex As Exception

Console.WriteLine(" Catch exception in a proram {0}", ex.Message)

End Try

Console.WriteLine(" Press any key to exit...")

Console.ReadKey()

End Sub

End Module

**OUTPUT-25**



**25) WAP for temperature conversion using radio button**

**Code:**

Public Class Form1

Private Sub RadioButton1\_CheckedChanged(sender As Object, e As EventArgs) Handles RadioButton1.CheckedChanged

If RadioButton1.Checked = True Then

Dim ResultFV As Double = (9 / 5) \* TextBox1.Text + 32

TextBox2.Text = ResultFV

End If

End Sub

Private Sub RadioButton2\_CheckedChanged(sender As Object, e As EventArgs) Handles RadioButton2.CheckedChanged

If RadioButton2.Checked = True Then

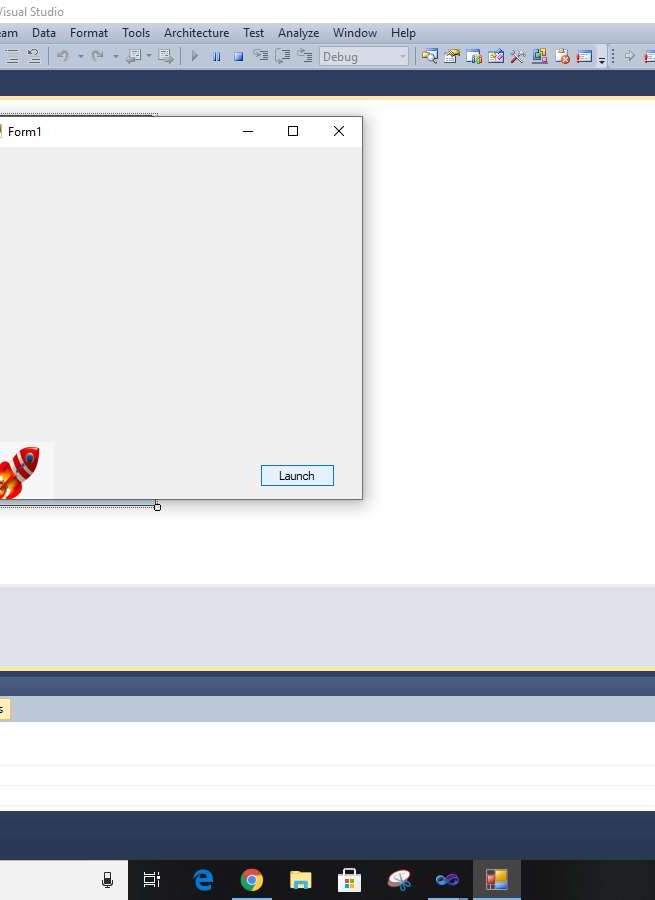
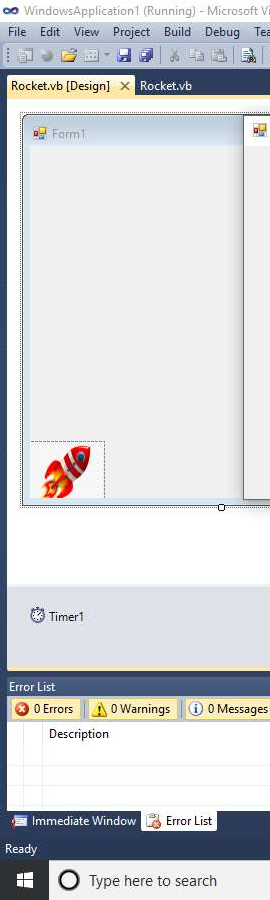
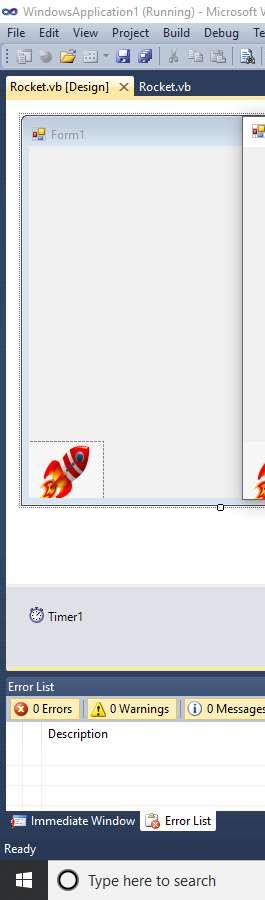
TextBox2.Text = TextBox1.Text

End If

End Sub

End Class

**OUTPUT-26**



**26)** **Write a program to launch the rocket using a picture box and timer tool.**

**CODE :-**

Public Class Form1

Private Sub Timer1\_Tick(sender As System.Object, e As System.EventArgs) Handles Timer1.Tick

PictureBox1.Top = PictureBox1.Top - 10 PictureBox1.Left = PictureBox1.Left + 10

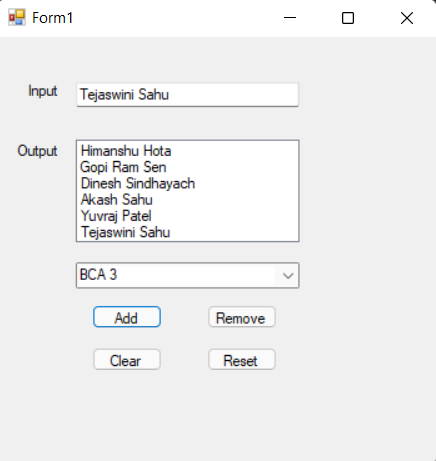
End Sub

Private Sub Button1\_Click(sender As System.Object, e As System.EventArgs) Handles Button1.Click

Timer1.Start() End Sub

End Class

**OUTPUT-27**



**27) WAP to illustrate all functionalities of list box and combo box.**

**Code:-**

Public Class Form1

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

ListBox1.Items.Add(TextBox2.Text)

End Sub

Private Sub TextBox2\_TextChanged(sender As Object, e As EventArgs) Handles TextBox2.TextChanged

End Sub

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

ListBox1.Items.Remove(TextBox2.Text)

End Sub

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

TextBox2.Text = ""

End Sub

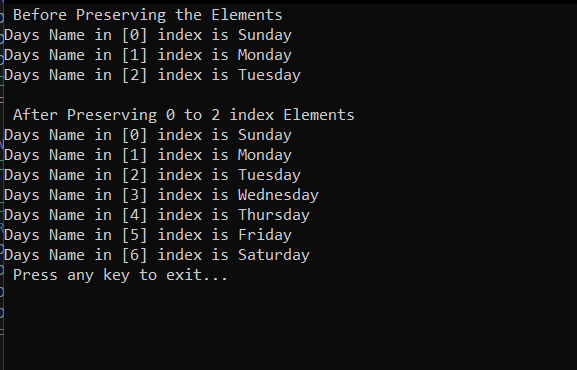
Private Sub Button3\_Click(sender As Object, e As EventArgs) Handles Button3.Click

ListBox1.Items.Clear()

End Sub

End Class

**OUTPUT-28**



**28) WAP to illustrate dynamic array using preserve keyword.**

**Code:-**

Module Module1

Sub Main()

Dim Days() As String

' Resize an Array using the ReDim Statement

ReDim Days(2)

Days(0) = "Sunday"

Days(1) = "Monday"

Days(2) = "Tuesday"

Console.WriteLine(" Before Preserving the Elements")

For i As Integer = 0 To Days.Length - 1

Console.WriteLine("Days Name in [{0}] index is {1}", i, Days(i))

Next

Console.WriteLine()

Console.WriteLine(" After Preserving 0 to 2 index Elements")

ReDim Preserve Days(6)

Days(3) = "Wednesday"

Days(4) = "Thursday"

Days(5) = "Friday"

Days(6) = "Saturday"

For i As Integer = 0 To Days.Length - 1

Console.WriteLine("Days Name in [{0}] index is {1}", i, Days(i))

Next

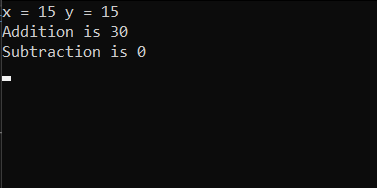
Console.WriteLine(" Press any key to exit...")

Console.ReadLine()

End Sub

End Module

**OUTPUT-29**



**29) Write a program to calculate addition and subtraction, the addition should be calculated by function with parameter passing value concept and the subtraction should be calculated by procedure with parameter passing reference concept.**

**Code:-**

Module Module1

Sub Subtraction(ByRef x As Integer, y As Integer)

Dim z As Integer = x - y

Console.WriteLine("Subtraction is {0}", z)

End Sub

Function Add(ByVal x As Integer, ByVal y As Integer)

Add = x + y

End Function

Sub Main()

Dim x As Integer = 15

Dim y As Integer = 15

Console.WriteLine("x = {0} y = {1}", x, y)

Console.WriteLine("Addition is {0}", Add(x, y))

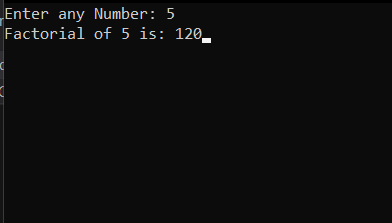
Subtraction(x, y)

Console.ReadLine()

End Sub

End Module

**OUTPUT-30**



**30) WAP to calculate factorial of a number using user define procedure.**

**Code:-**

**Module Module1**

Sub Main()

Dim i, number As Integer, fact As Integer = 1

Console.Write("Enter any Number: ")

number = Integer.Parse(Console.ReadLine())

For i = 1 To number

fact = fact \* i

Next

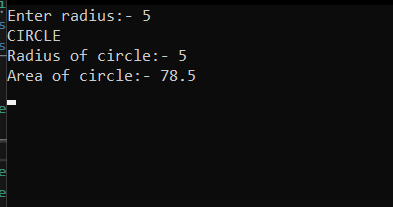
Console.Write("Factorial of " & number & " is: " & fact)

Console.ReadLine()

End Sub

End Module

**OUTPUT-31**



**31) Create a class circle with data member radius; provide member function to calculate area.**

**Code:-**

Module Module1

Public Class circle

Public r As Double = 5

Public a As Double = 6

Public Sub getdata()

Console.WriteLine("Enter radius:- {0}", r)

End Sub

Public Sub area()

Console.WriteLine("CIRCLE")

Console.WriteLine("Radius of circle:- {0}", r)

a = 3.14 \* r \* r

Console.WriteLine("Area of circle:- {0}", a)

End Sub

End Class

Sub Main()

Dim betichod As circle = New circle()

betichod.getdata()

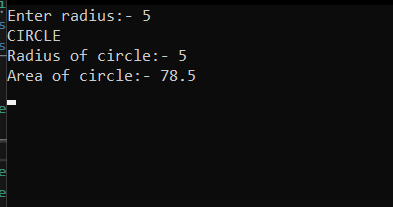
betichod.area()

Console.ReadLine()

End Sub

End Module

**OUTPUT-32**



**32)** **Derive a class sphere from class circle; provide member function to calculate volume. Derive c lass cylinder from class sphere with additional data member for height and member function to calculate volume.**

**Code:-**

Module Module1

Public Class circle

Public r As Double = 5

Public a As Double = 6

Public Sub getdata()

Console.WriteLine("Enter radius:- {0}", r)

End Sub

Public Sub area()

Console.WriteLine("CIRCLE")

Console.WriteLine("Radius of circle:- {0}", r)

a = 3.14 \* r \* r

Console.WriteLine("Area of circle:- {0}", a)

End Sub

End Class

Sub Main()

Dim betichod As circle = New circle()

betichod.getdata()

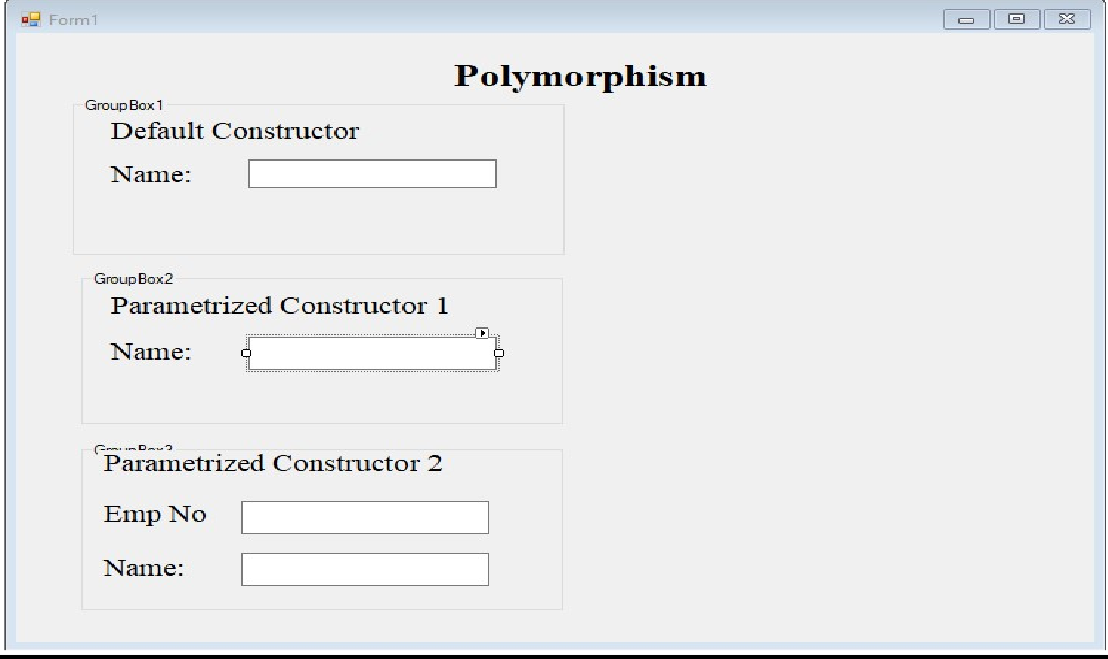
betichod.area()

Console.ReadLine()

End Sub

End Module

**OUTPUT-33**



**33) WAP to demonstrate concept of polymorphism(Constructor Overloading).**

**Code:-**

Imports Overloading.Employees Public Class Form1

Private Sub Label3\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Label3.Click

End Sub

Private Sub Form1\_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

Dim obj As New Employees()

Dim obj1 As New Employees("Sheetal Joshi")

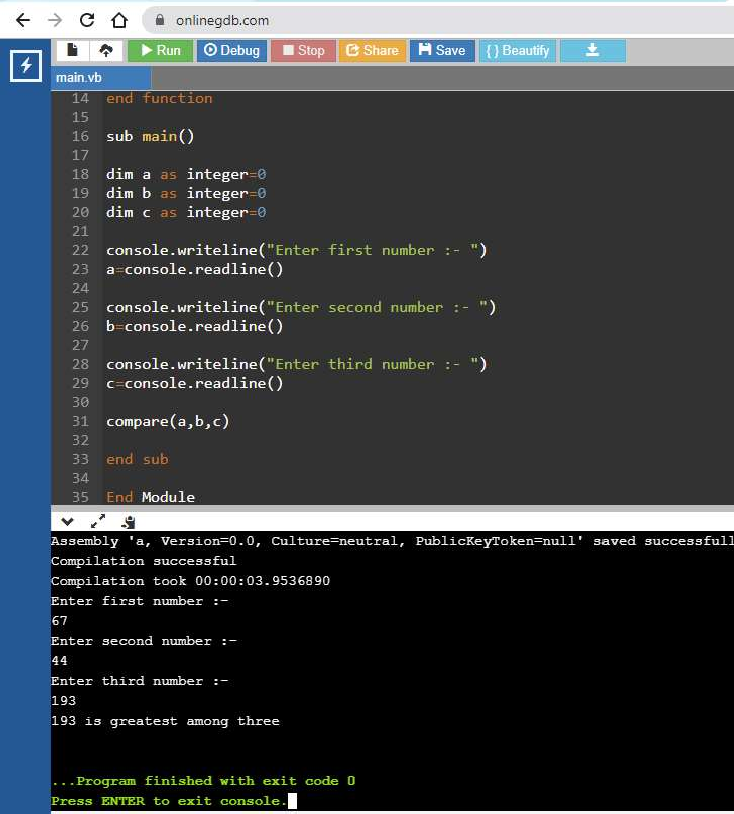
Dim obj2 As New Employees("20", "Sheetal Joshi") End Sub

Private Sub TextBox2\_TextChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles TextBox2.TextChanged

End Sub

End Class

**OUTPUT-34**



**34) WAP to find the greatest among three given numbers using user defined procedures.**

**Code:**

Module great

function compare(Byval a As Integer,Byval b As Integer,Byval c As Integer) As Integer

if a>=b and a>=c then

console.writeline("{0} is greatest among three",a)

elseif b>=a and b>=c

console.writeline("{0} is greatest among three",b)

else

console.writeline("{0} is greatest among three",c)

end if

end function

sub main()

dim a as integer=0

dim b as integer=0

dim c as integer=0

console.writeline("Enter first number :- ")

a=console.readline()

console.writeline("Enter second number :- ")

b=console.readline()

console.writeline("Enter third number :- ")

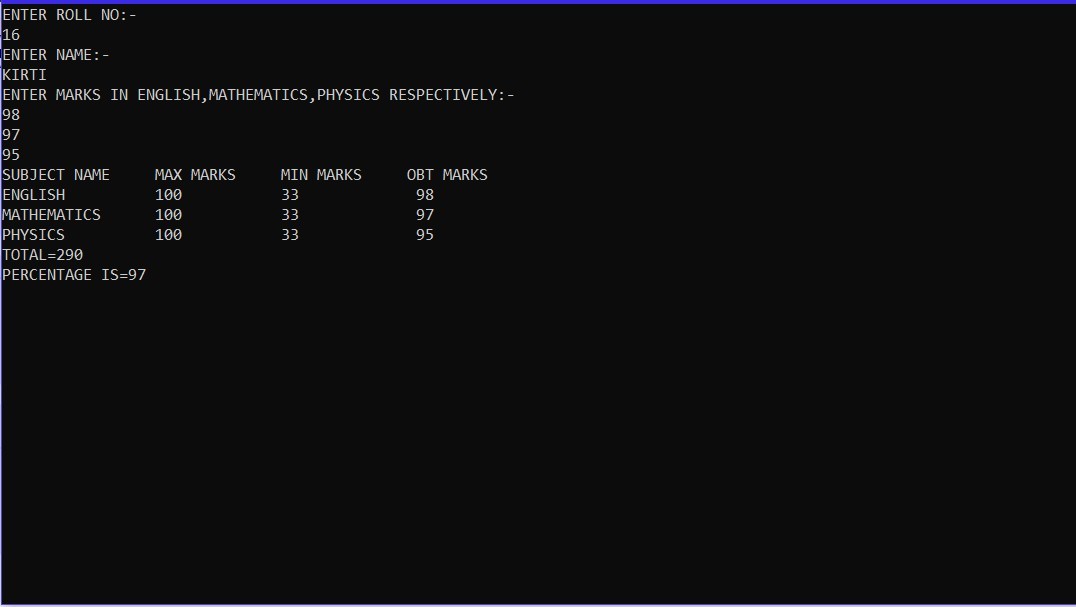
c=console.readline()

compare(a,b,c)

end sub

End Module

**OUTPUT-35**



**35) Create a class student having data member to store roll number, name of student, name of three subject, max marks, min marks, obtained marks. Declare an object of class student. Provide facility to input data in data member and display result of student**.

**Code:**

Imports System

Module Module1

Public Class student

Public roll, sub1, sub2, sub3, total As Integer

Public name As String

Public per As Integer

Public Sub input()

Console.WriteLine("ENTER ROLL NO:-")

roll = Console.ReadLine()

Console.WriteLine("ENTER NAME:-")

name = Console.ReadLine()

Console.WriteLine("ENTER MARKS IN ENGLISH,MATHEMATICS,PHYSICS RESPECTIVELY:-")

sub1 = Console.ReadLine()

sub2 = Console.ReadLine()

sub3 = Console.ReadLine()

Console.WriteLine("SUBJECT NAME MAX MARKS MIN MARKS OBT MARKS")

Console.WriteLine("ENGLISH 100 33 {0}", sub1)

Console.WriteLine("MATHEMATICS 100 33 {0}", sub2)

Console.WriteLine("PHYSICS 100 33 {0}", sub3)

End Sub

Public Sub cal()

total = sub1 + sub2 + sub3 per = total / 3

Console.WriteLine("TOTAL={0}", total)

Console.WriteLine("PERCENTAGE IS={0}", per)

End Sub

End Class

Sub Main()

Dim obj = New student() obj.input()

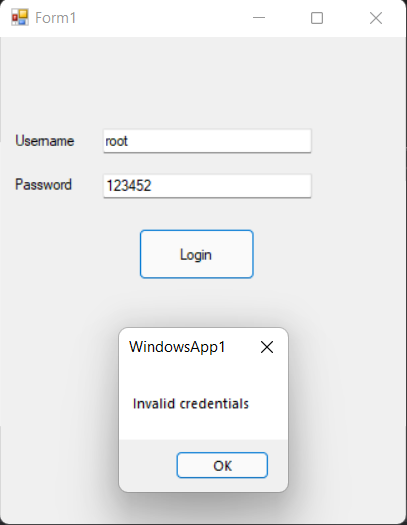
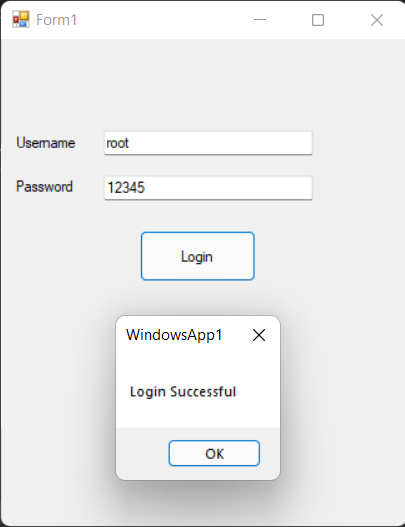
obj.cal()

Console.ReadLine()

End Sub

End Module

**OUTPUT-36**



**36**) **Design a login form in VB.Net for Username Password validation.**

**Code:-**

Module Module1

Public Class Form1

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

If TextBox1.Text = "root" And TextBox2.Text = "12345" Then

MsgBox("Login Successful ")

Else

MsgBox("Invalid credentials")

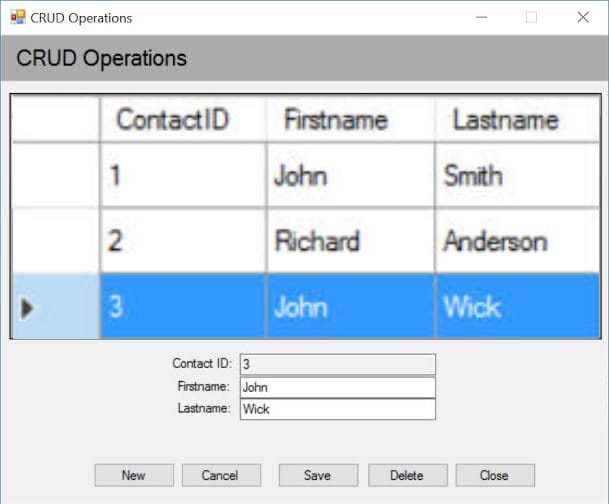
End If

End Sub

End Class

End Module

**OUTPUT-37**

****

**37) WAP to display records of a table using data adapter and code for buttons to move at first record, next record, previous record, last record in the table.**

**Code:**

Imports System.Data.OleDb

Public Class Form1

Dim con As New OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=C:\Users\Administrator\Documents\demo.accdb")

Dim cmd As New OleDbCommand

Private Sub Form1\_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

'TODO: This line of code loads data into the 'DemoDataSet.Table1' table. You can move, or remove it, as needed.

con.Open()

Me.Table1TableAdapter.Fill(Me.DemoDataSet.Table1)

cmd.Connection = con

End Sub

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

Table1BindingSource.AddNew()

End Sub

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

Table1BindingSource.EndEdit()

Table1TableAdapter.Update(DemoDataSet.Table1)

cmd.CommandText = "insert into table1 values( '" & TextBox1.Text & "','" & TextBox2.Text & "')"

cmd.ExecuteNonQuery()

MsgBox("hi")

End Sub

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

Table1BindingSource.RemoveCurrent()

If Me.DataGridView1.Rows.Count > 0 Then

cmd.CommandText = "delete from table1 where name='" & TextBox1.Text & "'"

cmd.ExecuteNonQuery()

' Me.Table1TableAdapter.Fill(Me.DemoDataSet.Table1)

End If

End Sub

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

Table1BindingSource.MoveNext()

End Sub

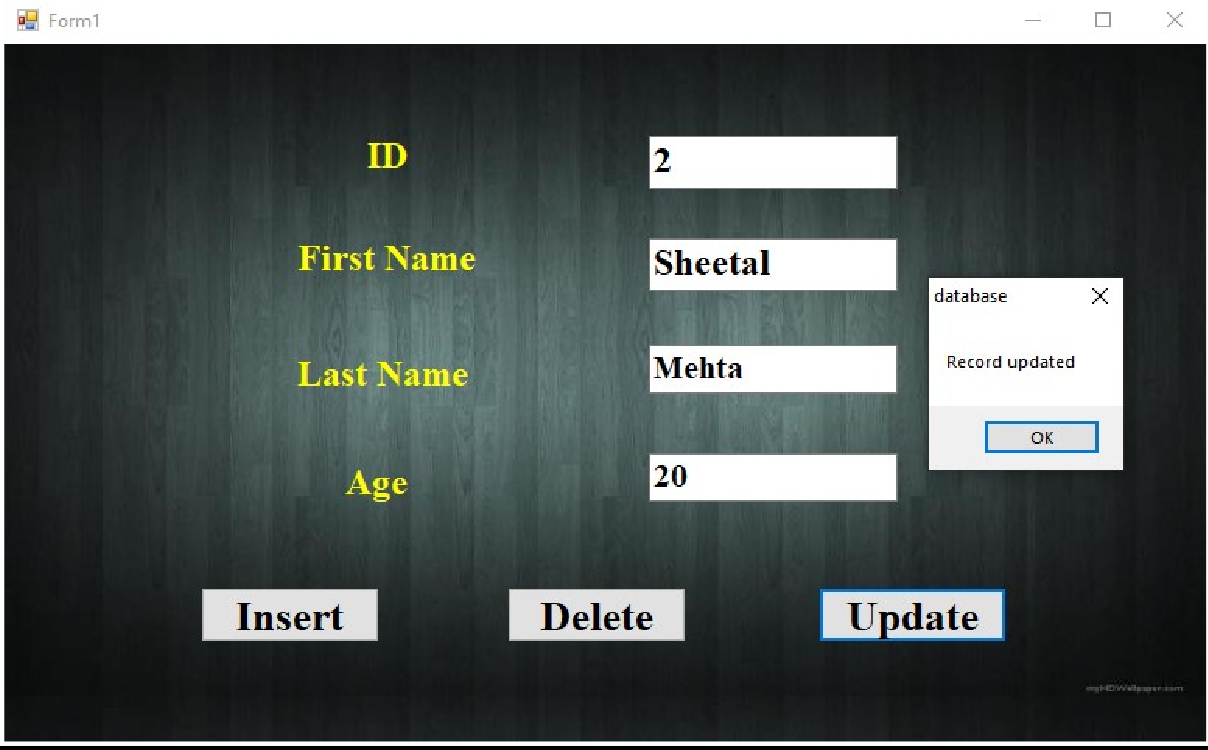
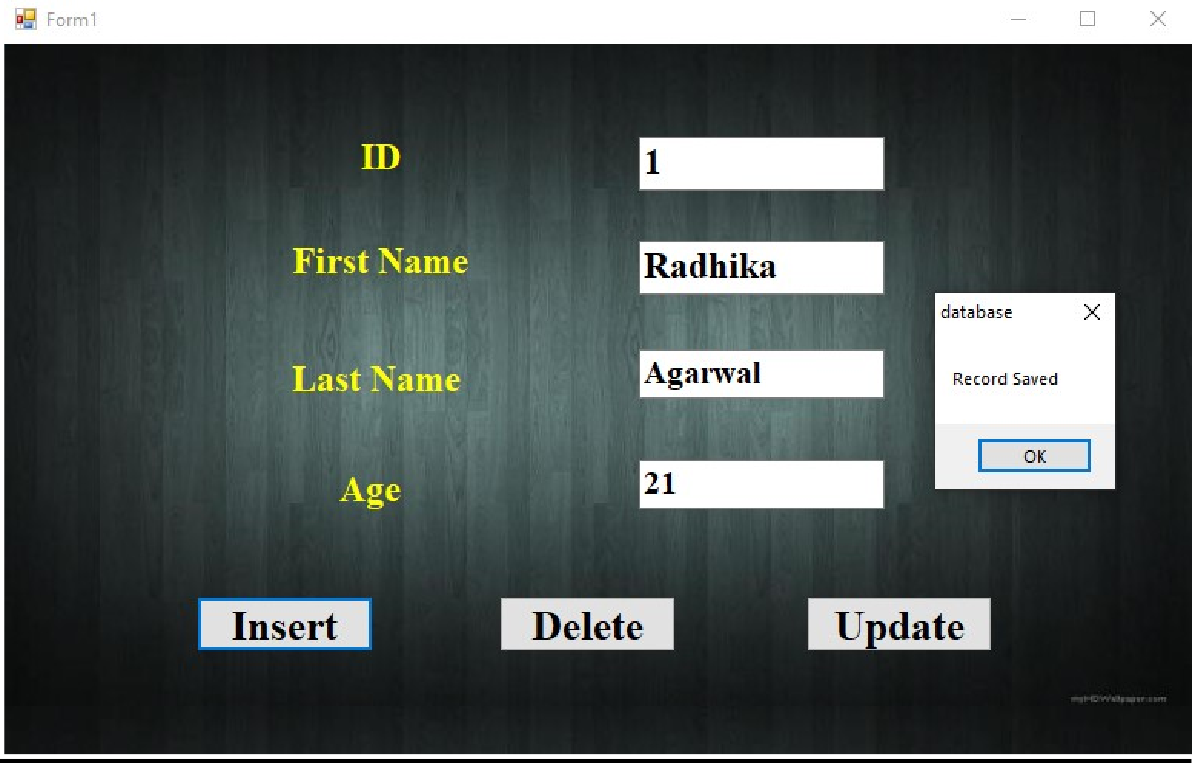
Private Sub Button5\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button5.Click

Table1BindingSource.MovePrevious()

End Sub

End Class

**OUTPUT-38**



**38)** **Create windows application for insert, update and delete data from database using navigator.**

**Code:**

Imports System.Data.OleDb

Public Class Form1

Dim pro As String

Dim connstring As String Dim command As String

Dim myconnection As OleDbConnection = New OleDbConnection

Private Sub Form1\_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

End Sub

Private Sub TextBox2\_TextChanged(ByVal sender As System.Object, ByVal e As System.EventArgs)

End Sub

Private Sub Button1\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)

Handles Button1.Click

pro = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source = C:\Users\hp\Documents\Database.accdb"

connstring = pro myconnection.ConnectionString = connstring

command = "insert into Table1 ([ID],[First Name],[Last Name],[Age]) values { ' " & TextBox1.Text & " ','" & TextBox2.Text & " ','" & TextBox3.Text & " ','" & TextBox4.Text & " '} "

Dim cmd As OleDbCommand = New OleDbCommand(command, myconnection) cmd.Parameters.Add(New OleDbParameter("ID", CType(TextBox1.Text, String))) cmd.Parameters.Add(New OleDbParameter("First Name", CType(TextBox2.Text, String))) cmd.Parameters.Add(New OleDbParameter("Last Name", CType(TextBox3.Text, String))) cmd.Parameters.Add(New OleDbParameter("Age", CType(TextBox4.Text, String)))

MsgBox("Record Saved")

Try

cmd.ExecuteNonQuery() cmd.Dispose() myconnection.Close() TextBox1.Clear() TextBox2.Clear()

TextBox3.Clear() TextBox4.Clear() Catch ex As Exception

MsgBox(ex.Message)

End Try

End Sub

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

pro = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source = C:\Users\hp\Documents\Database.accdb"

connstring = pro myconnection.ConnectionString = connstring

command = "Delete From [Table1] where [ID]=" & TextBox1.Text & ""

Dim cmd As OleDbCommand = New OleDbCommand(command, myconnection) MsgBox("Record deleted")

Try

cmd.ExecuteNonQuery() cmd.Dispose() myconnection.Close() TextBox1.Clear() TextBox2.Clear() TextBox3.Clear() TextBox4.Clear()

Catch ex As Exception MsgBox(ex.Message)

End Try

End Sub

Private Sub Button3\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)

Handles Button3.Click

pro = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source = C:\Users\hp\Documents\Database.accdb"

connstring = pro myconnection.ConnectionString = connstring

command = "update Table1 set [First Name]='" & TextBox2.Text & "',[Last Name]='" & TextBox3.Text & " ', [Age]='"

Dim cmd As OleDbCommand = New OleDbCommand(command, myconnection) MsgBox("Record updated")

Try

cmd.ExecuteNonQuery() cmd.Dispose() myconnection.Close() TextBox1.Clear() TextBox2.Clear() TextBox3.Clear() TextBox4.Clear()

Catch ex As Exception MsgBox(ex.Message)

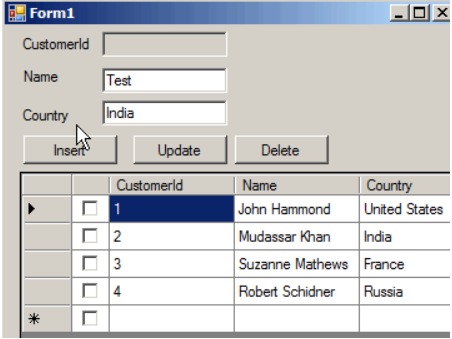
End Try

End Sub

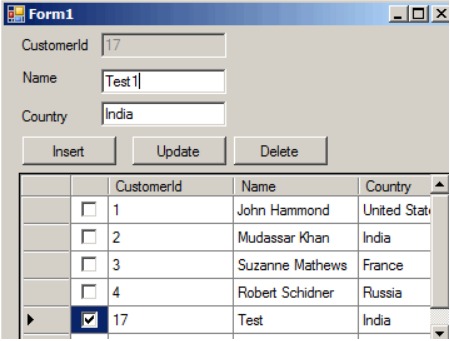
End Class

**OUTPUT:39**

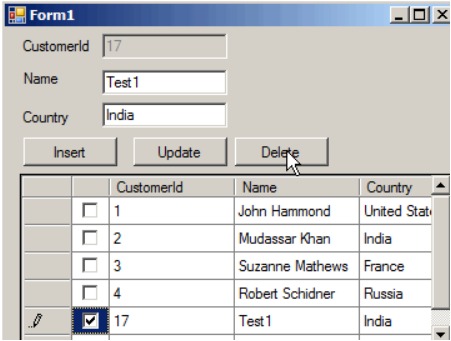
Insert



Update



**Delete**



**39)** **Design window application to insert, update and delete operation on table using DataGrid view method.**

**Code:**

Imports System.Data.OleDb

Public Class Form1

Dim con As New OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=C:\Users\user\Documents\mydatabase.accdb")

Dim cmd As New OleDbCommand

Private Sub Form1\_Load(sender As System.Object, e As System.EventArgs) Handles MyBase.Load

con.Open()

MsgBox("DATABASE CONNECTION SUCCEDED")

cmd.Connection = con con.Close()

End Sub

Private Sub Button3\_Click(sender As System.Object, e As System.EventArgs) Handles Button3.Click

con.Open()

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Then

MsgBox("PLEASE PROVIDE DATA IN DATABASE")

Else

cmd.CommandText = "insert into db\_con values('" & TextBox1.Text & "','" & TextBox2.Text & "','" & TextBox3.Text & "','" & TextBox4.Text & "')"

cmd.ExecuteNonQuery() MsgBox("YOUR DATA IS INSERTED")

TextBox1.Text = " " TextBox2.Text = " " TextBox3.Text = " " TextBox4.Text = " "

End If

con.Close()

End Sub

Private Sub Button6\_Click(sender As System.Object, e As System.EventArgs) Handles Button6.Click

con.Open()

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Then

MsgBox("PLEASE PROVIDE DATA")

Else

cmd.CommandText = "delete from db\_con where Rollno=" & TextBox1.Text & "" cmd.ExecuteNonQuery()

MsgBox("YOUR ENTERED DATA IS DELETED")

TextBox1.Text = " " TextBox2.Text = " " TextBox3.Text = " " TextBox4.Text = " "

End If con.Close()

End Sub

Private Sub Button5\_Click(sender As System.Object, e As System.EventArgs) Handles Button5.Click

con.Open()

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Then

MsgBox("PLEASE PROVIDE DATA")

Else

cmd.CommandText = " update db\_con set Name= '" & TextBox2.Text & "', Class= '" & TextBox3.Text & "', City= '" & TextBox4.Text & "' "

cmd.ExecuteNonQuery()

MsgBox("YOUR PROVIDED DATA HAS BEEN UPDATED")

TextBox1.Text = " " TextBox2.Text = " " TextBox3.Text = " " TextBox4.Text = " "

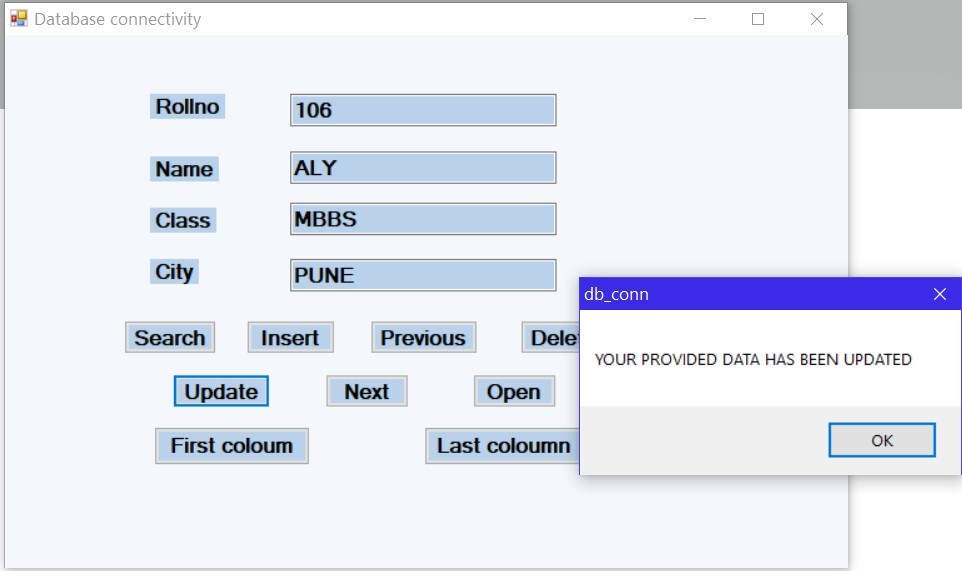
End If

con.Close()

End Sub

End Class

**OUTPUT 40**



**40) Design windows application to illustrate Database Connectivity using OleDb API and perform insert,update and delete operation on table.**

**Code:**

Imports System.Data.OleDb

Public Class Form1

Dim con As New OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=C:\Users\user\Documents\mydatabase.accdb")

Dim cmd As New OleDbCommand

Private Sub Form1\_Load(sender As System.Object, e As System.EventArgs) Handles MyBase.Load

con.Open()

MsgBox("DATABASE CONNECTION SUCCEDED")

cmd.Connection = con con.Close()

End Sub

Private Sub Button3\_Click(sender As System.Object, e As System.EventArgs) Handles Button3.Click

con.open()

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Then

MsgBox("PLEASE PROVIDE DATA IN DATABASE")

Else

cmd.CommandText = "insert into db\_con values('" & TextBox1.Text & "','" & TextBox2.Text & "','" & TextBox3.Text & "','" & TextBox4.Text & "')"

cmd.ExecuteNonQuery() MsgBox("YOUR DATA IS INSERTED")

TextBox1.Text = " " TextBox2.Text = " " TextBox3.Text = " " TextBox4.Text = " "

End If

con.Close()

End Sub

Private Sub Button6\_Click(sender As System.Object, e As System.EventArgs) Handles Button6.Click

con.Open()

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Then

MsgBox("PLEASE PROVIDE DATA")

Else

cmd.CommandText = "delete from db\_con where Rollno=" & TextBox1.Text & "" cmd.ExecuteNonQuery()

MsgBox("YOUR ENTERED DATA IS DELETED")

TextBox1.Text = " " TextBox2.Text = " " TextBox3.Text = " " TextBox4.Text = " "

End If

con.Close()

End Sub

Private Sub Button5\_Click(sender As System.Object, e As System.EventArgs) Handles Button5.Click

con.Open()

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Then

MsgBox("PLEASE PROVIDE DATA")

Else

cmd.CommandText = " update db\_con set Name= '" & TextBox2.Text & "', Class= '" & TextBox3.Text & "', City= '" & TextBox4.Text & "' "

cmd.ExecuteNonQuery()

MsgBox("YOUR PROVIDED DATA HAS BEEN UPDATED")

TextBox1.Text = " " TextBox2.Text = " " TextBox3.Text = " " TextBox4.Text = " "

End If

con.Close()

End Sub

End Class