

A
Practical File
On
LAB VIII: Dot Net Technology
(BCA-308)
Submitted In

Partial fulfilment of the requirements for the award of the degree of
Bachelor of Computer Application

For



Session: 2021-22

Guided by

Ms. Barkha Raghuwanshi
Asst. Prof. (Comp. Dept.)

Submitted by

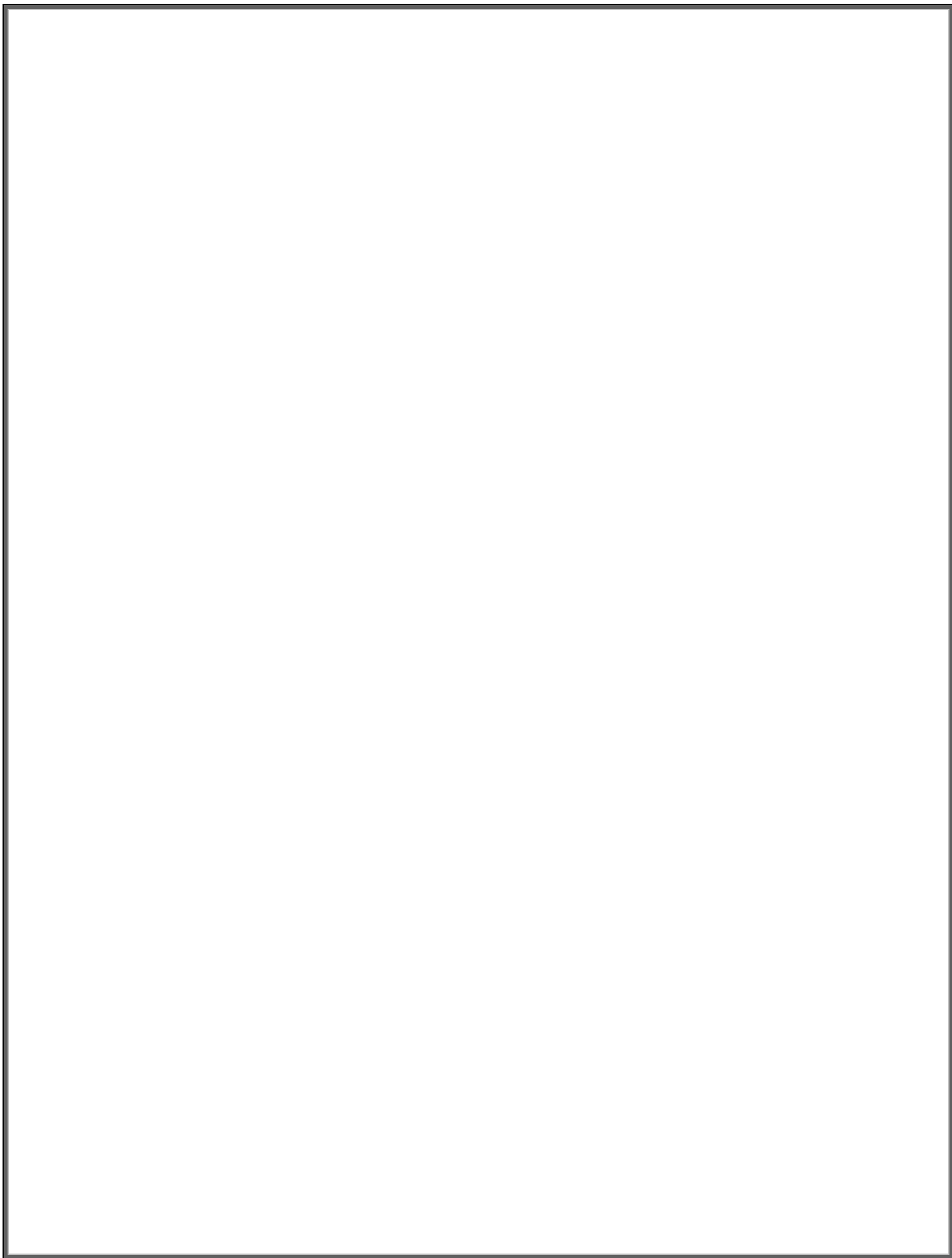
Himanshu Hota
BCA III

At

Disha College, Raipur

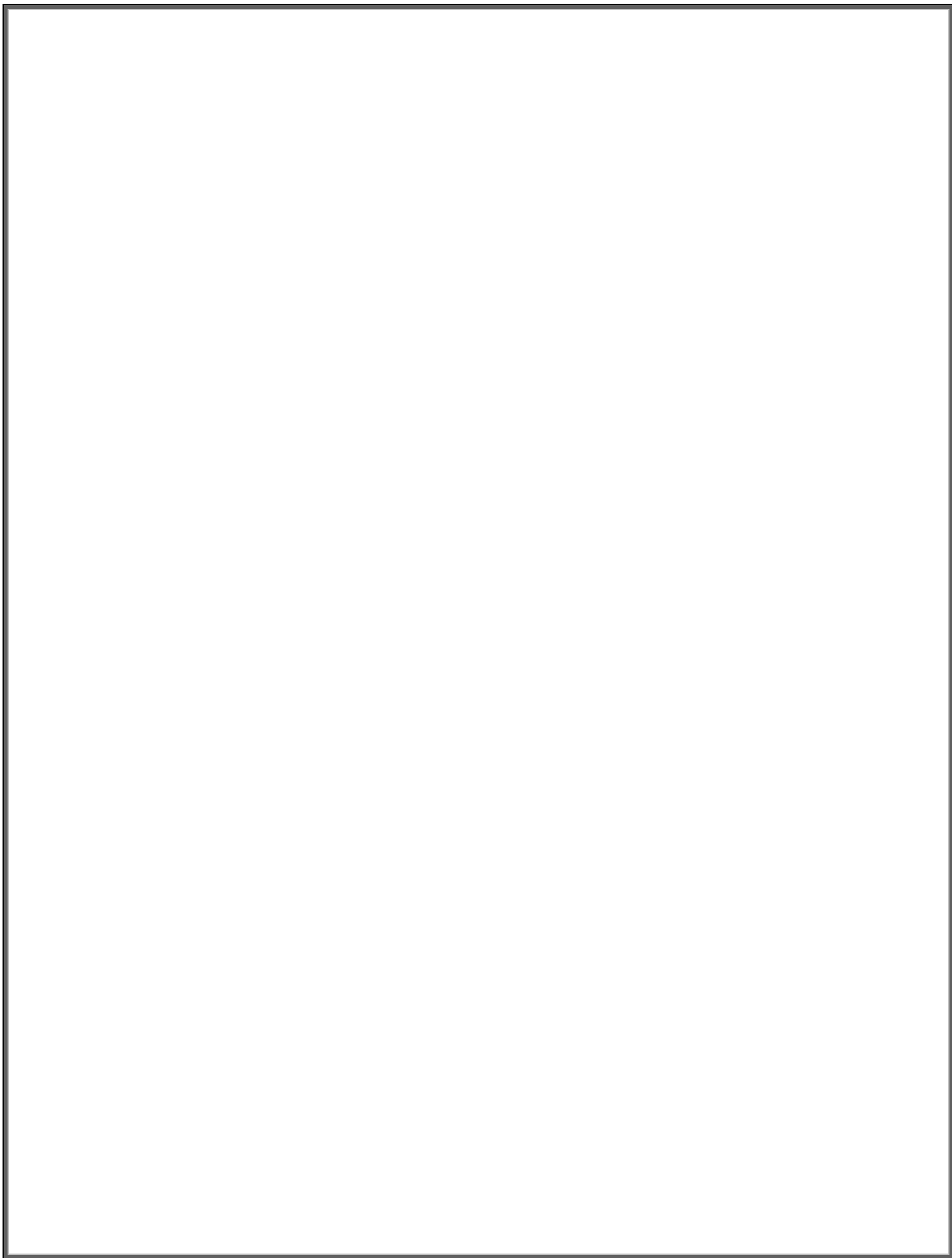
Affiliated to

Pt. Ravishankar Shukla University, Raipur (C. G.)



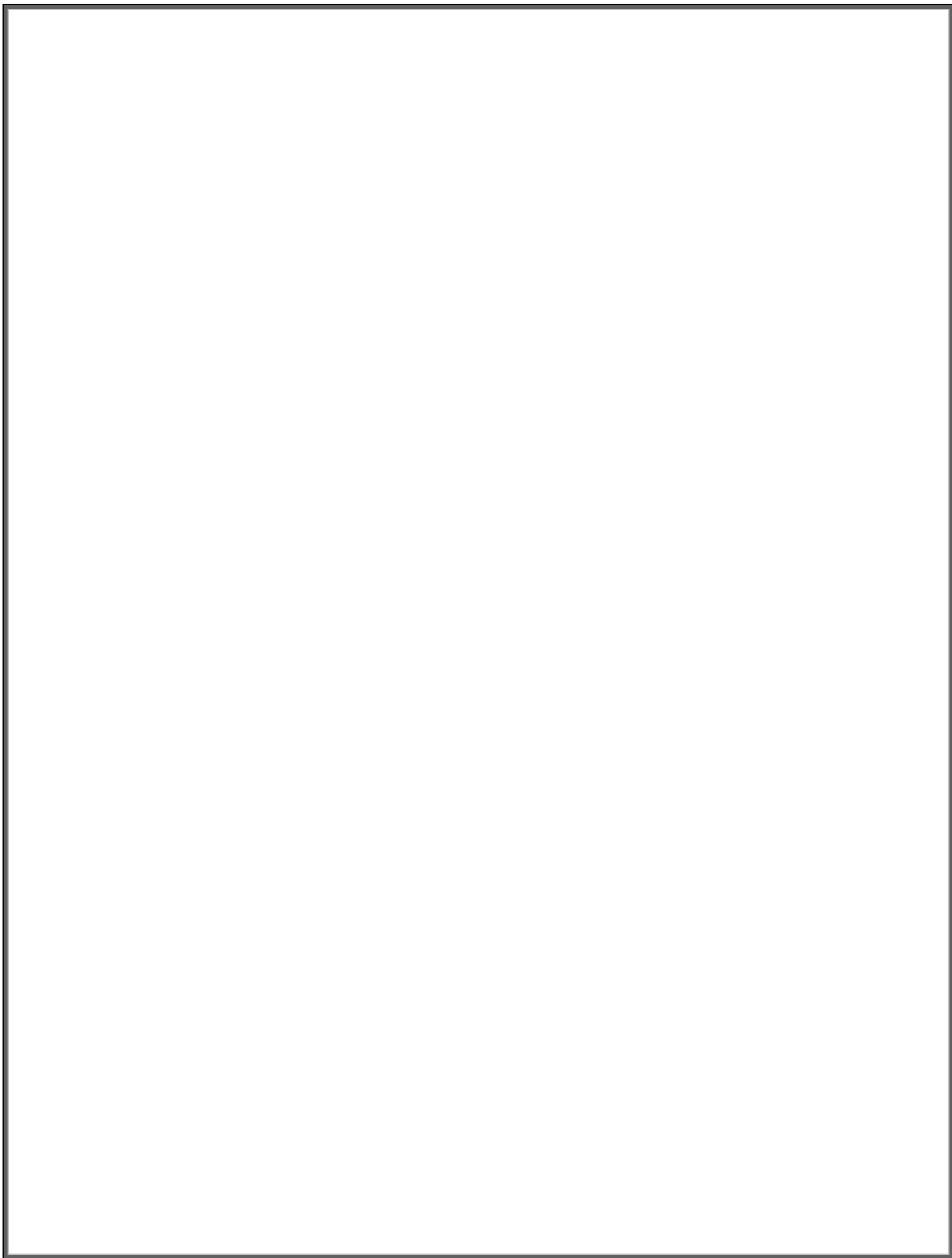
INDEX

S.No.	List of Objectives	Pg. No.
1.	Write a program to check whether a year is leap year or not.	1-2
2.	Write a program to check whether a character is alphabet or not.	3-4
3.	Design an application to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following: Percentage \geq 90% : Grade A Percentage \geq 80% : Grade B Percentage \geq 70% : Grade C Percentage \geq 60% : Grade D Percentage \geq 40% : Grade E Percentage $<$ 40% : Grade F	5-8
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 An additional surcharge of 20% is added to the bill	9-12

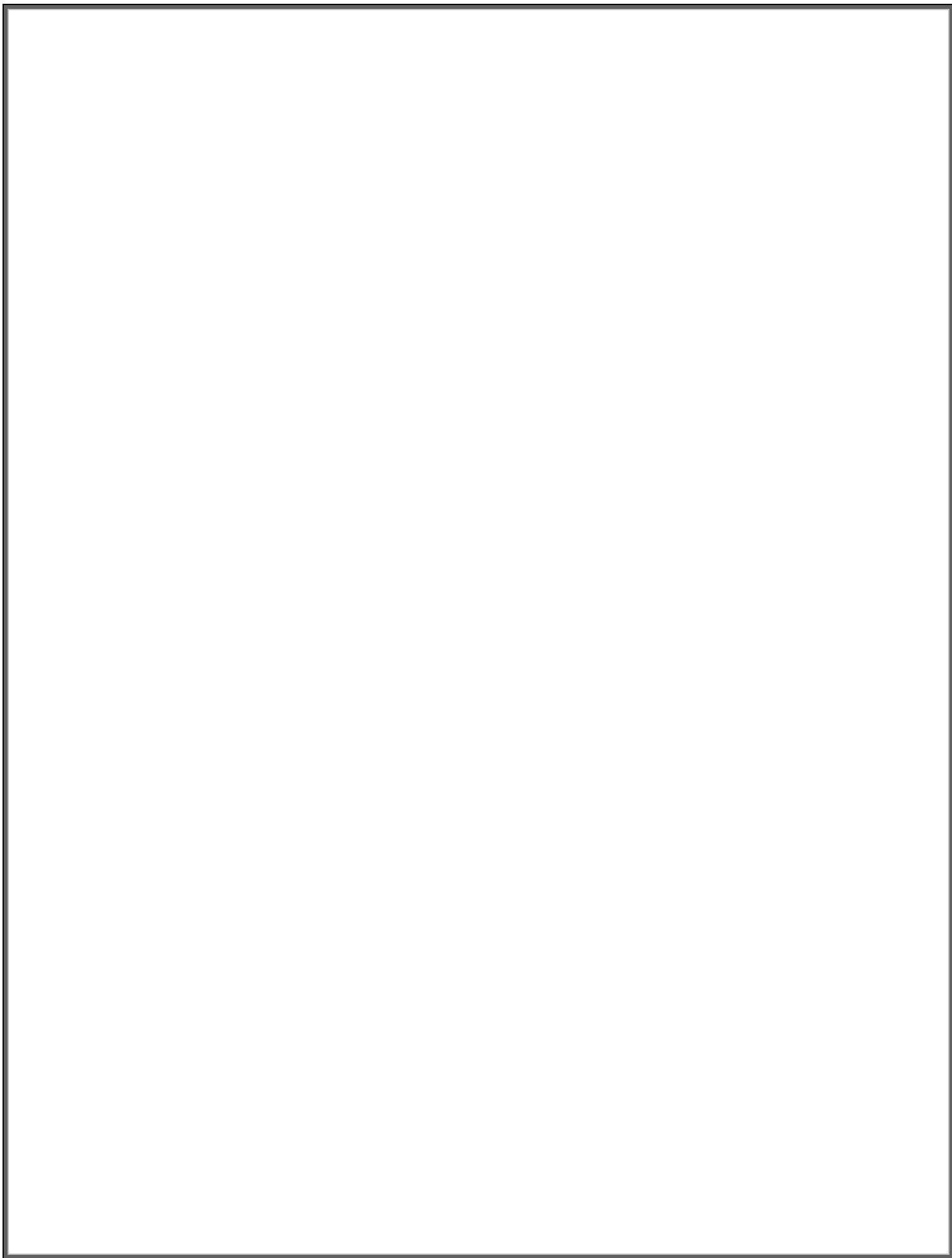


5.	Design a form to check whether a number is prime or not by using input box and message box.	13-14
6.	WAP to convert decimal to binary number system using bitwise operator.	15-16
7.	Write a program to create Simple Calculator using select case.	17-18
8.	WAP to find sum of all natural numbers between 1 to n.	19-20
9.	Write a program to swap two numbers using bitwise operator	21-22
10.	Write a program to find first and last digit of any number.	23-24
11.	Design an application for displaying welcome message.	25-26
12.	Write a program using shift operator.	27-28
13.	WAP to check whether given number is neon or not using user define function.	29-30
14.	Write a program to enter any number and print its reverse.	31-32
15.	Write a program to enter any number and check whether the number is palindrome or not.	33-34
16.	WAP to check whether a given number is spy number or not.	35-36

17.	Write a program to print Fibonacci series up to n terms.	37-38
18.	Write a program to print Pascal triangle up to n rows.	39-40
19.	Write a program to print all negative elements in an array.	41-42
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.	43-46
21.	Design a window application for simple arithmetic operations.	47-50
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.	51-54
23.	Write a program to sort an array.	55-58
24.	Write a program to illustrate exception handling.	59-60
25.	WAP for temperature conversion using radio button.	61-62
26.	WAP to launch a rocket using Picture box and Timer control.	63-64
27.	WAP to illustrate all functionalities of list box and combo box.	65-66

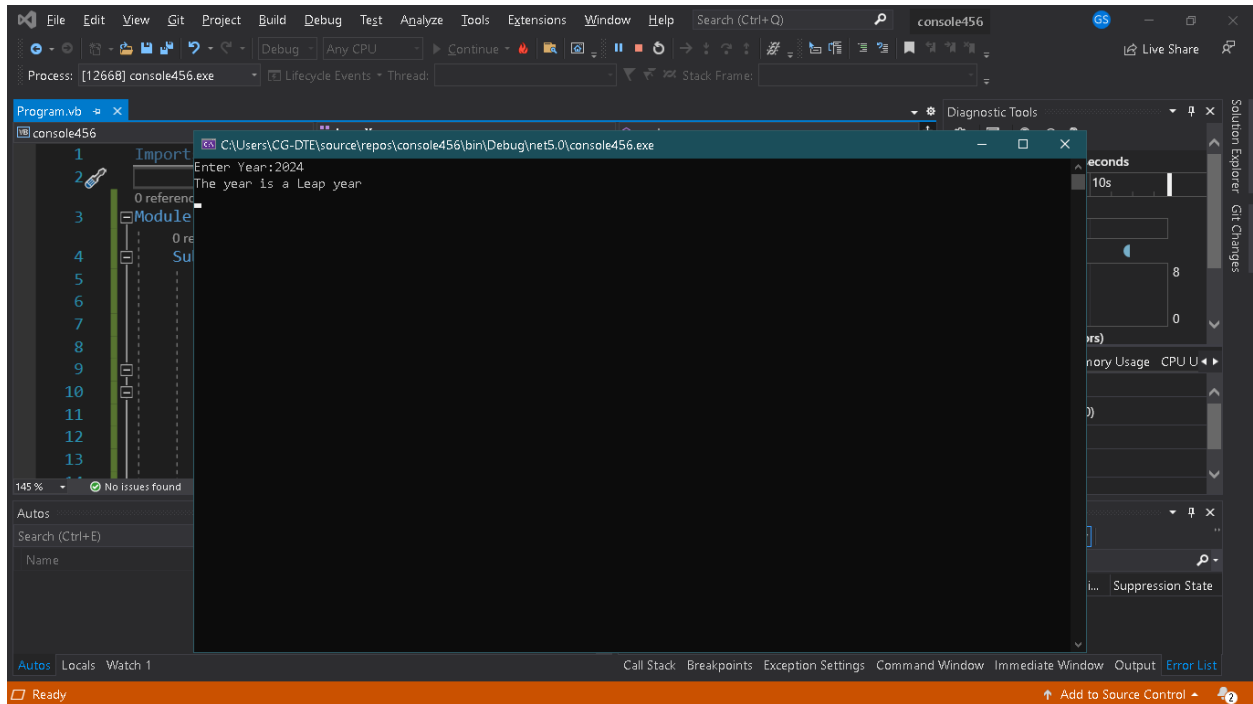


28.	WAP to illustrate dynamic array using preserve keyword.	67-70
29.	Write a program to calculate addition and subtraction, the addition should be calculated by function with parameter passing value concept and the subtraction should be calculated by procedure with parameter passing reference concept.	71-72
30.	WAP to calculate factorial of a number using user define procedure.	73-74
31.	Create a class circle with data member radius; provide member function to calculate area.	75-76
32.	Derive a class sphere from class circle; provide member function to calculate volume. Derive class cylinder from class sphere with additional data member for height and member function to calculate volume.	77-78
33.	WAP to demonstrate concept of Polymorphism (constructor Overloading).	79-80
34.	WAP to find greatest among three given number using user define procedures.	81-82
35.	Create a class Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare an object of class student. Provide facilities to input data in data members and display result of student.	83-84
36.	Design a login form in VB.Net for Username Password validation.	85-86



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.	87-90
38.	Create a window application to insert, update and delete data from database using navigator.	91-96
39.	Design window application to insert, update and delete operation on table using Data grid view method.	97-100
40.	Design a window application to illustrate Database connectivity using OleDb API and perform insert, update and delete operation on table.	101-106

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

```
C:\Users\CG-DTE\source\repos\prectical\
Enter any key :-
S
S is an Alphabet
_
```

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)

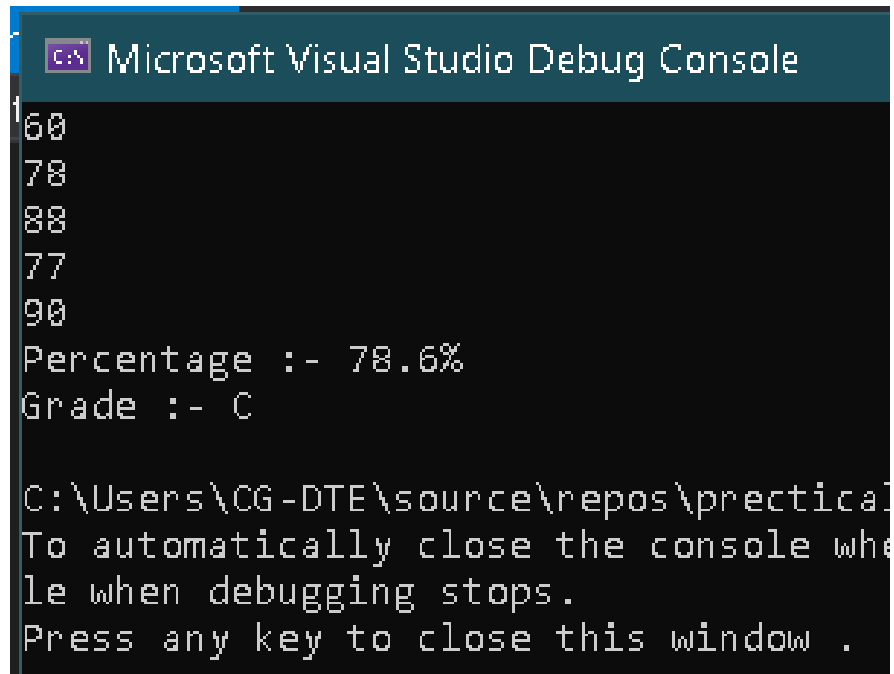
End Select

Console.ReadLine()

End Sub

End Module

OUTPUT-3



```
C:\> Microsoft Visual Studio Debug Console  
68  
78  
88  
77  
90  
Percentage :- 78.6%  
Grade :- C  
  
C:\Users\CG-DTE\source\repos\practical1\practical1>  
To automatically close the console when debugging stops,  
press any key to close this window .
```

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 Percent

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

```
Microsoft Visual Studio Debug Console
Enter electricity used (in units) :-
188.8
Electricity bill per unit :- 226.56
Additional sub-charges on bill :- 45.312000000000005
Total electricity bill :- 271.872

C:\Users\CG-DTE\source\repos\prectical\bin\Debug\net5
Press any key to close this window . . .
```

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)`

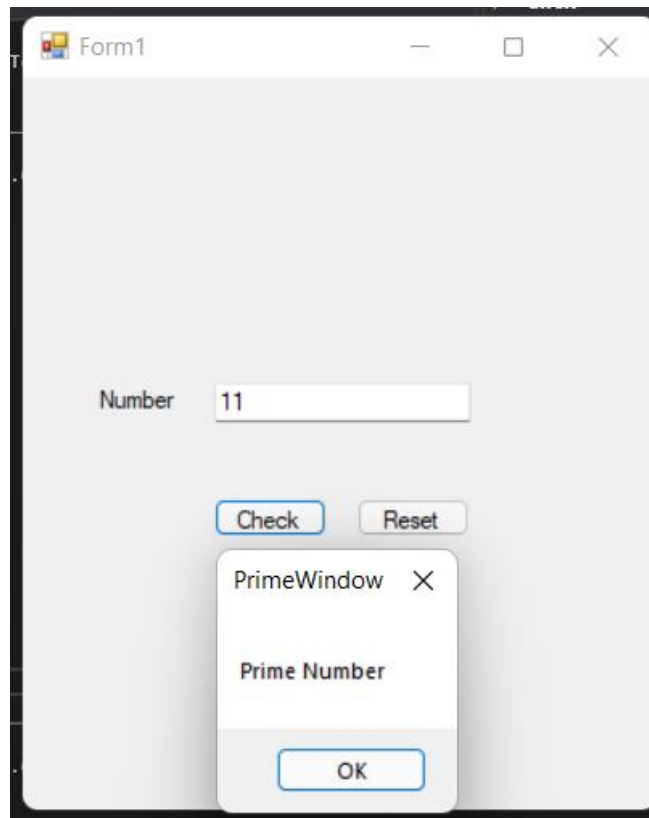
`Console.WriteLine("Additional sub-charges on bill :- {0}", a)`

`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

[illegible]

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")

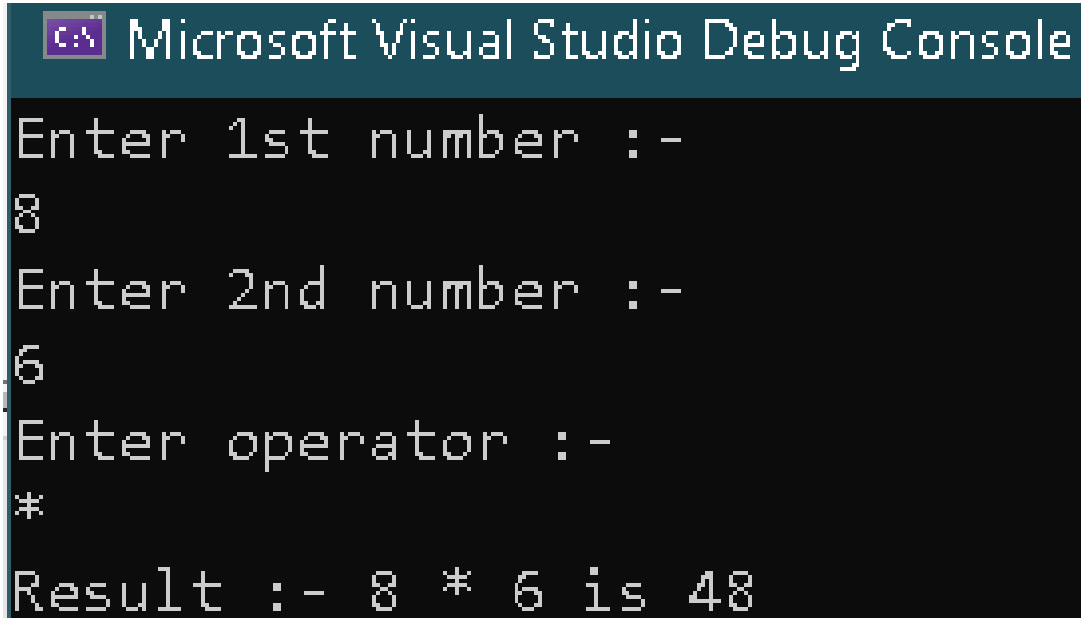
End If

Next

End Sub

End Module

OUTPUT-7



```
Microsoft Visual Studio Debug Console
Enter 1st number :-
8
Enter 2nd number :-
6
Enter operator :-
*
Result :- 8 * 6 is 48
```

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

 Microsoft Visual Studio Debug Console

```
Enter a Natural number : -
```

```
256
```

```
Sum of natural numbers from 1 to 256 is 32896
```

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

 Microsoft Visual Studio Debug Console

Enter 2 numbers:

8

9

Before Swapping :- 8 9

After Swapping :- 9 8

9) 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

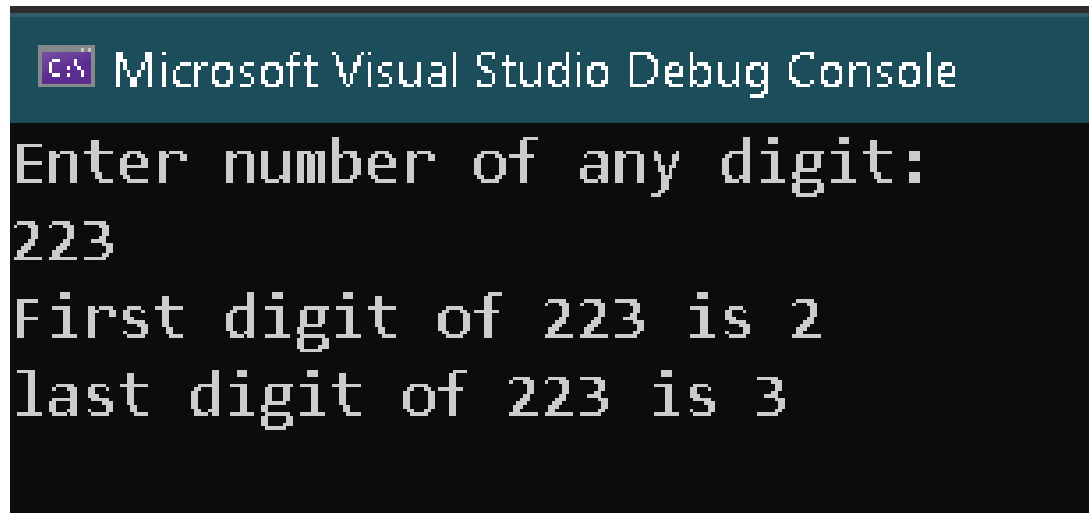
num1 = num1 Xor num2

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

End Sub

End Module

OUTPUT-10



```
C:\> Microsoft Visual Studio Debug Console
Enter number of any digit:
223
First digit of 223 is 2
last digit of 223 is 3
```

10) 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)

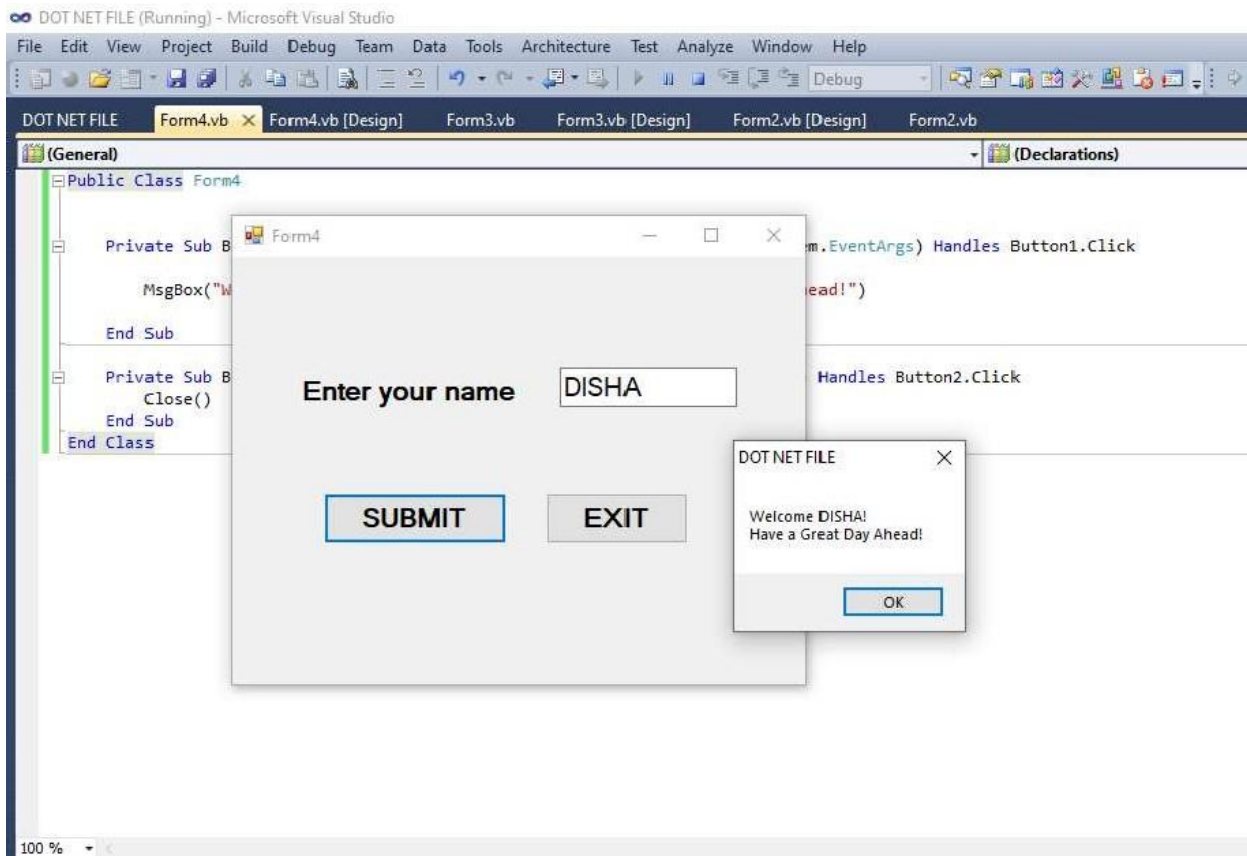
l = n Mod 10

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

End Sub

End Module

OUTPUT-11



11) 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 + "!" + vbCrLf + "Have a Great Day Ahead!")
```

```
End Sub
```

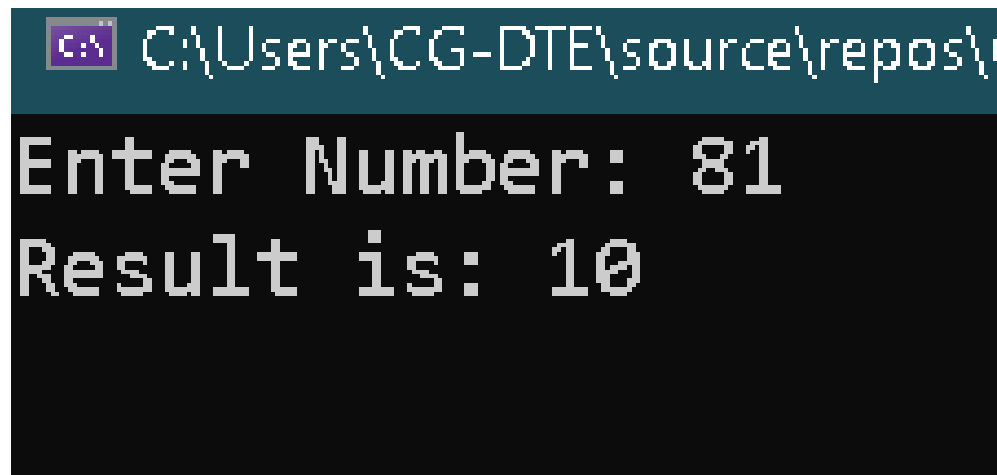
```
Private Sub Button2_Click(sender As System.Object, e As System.EventArgs) Handles Button2.Click
```

```
Close()
```

```
End Sub
```

```
End Class
```

OUTPUT-12



```
C:\Users\CG-DTE\source\repos\  
Enter Number: 81  
Result is: 10
```

12) 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

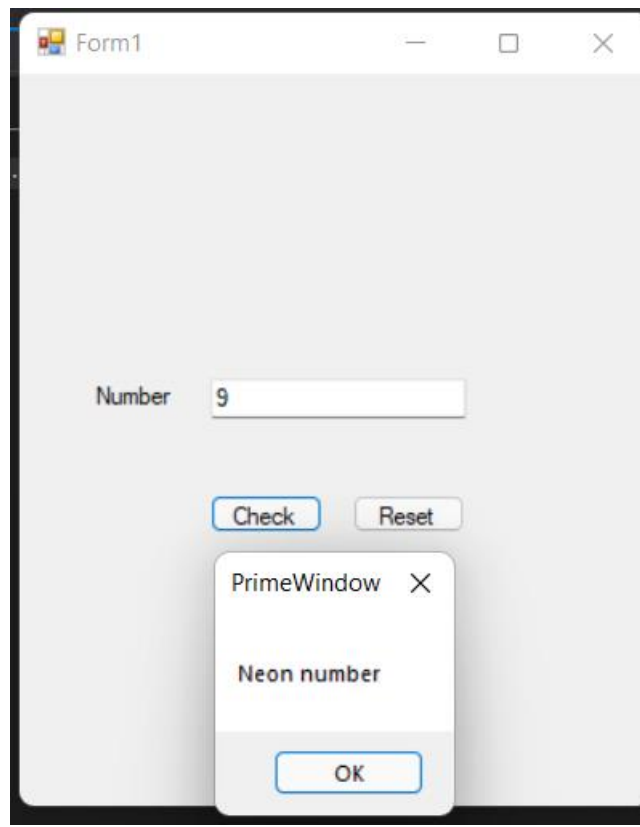
Console.Write("Result is: {0}", res)

Console.ReadLine()

End Sub

End Module

OUTPUT-13



13) 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
```

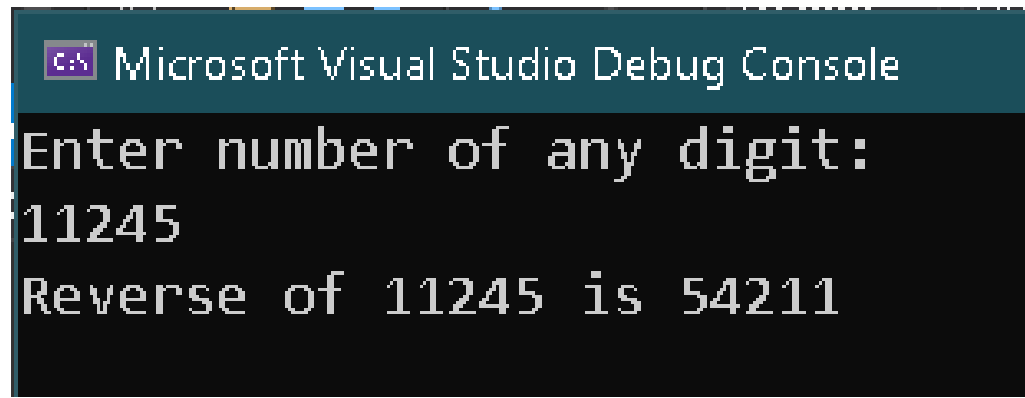
```
Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
```

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

```
End Sub
```

```
End Class
```


OUTPUT-14

A screenshot of the Microsoft Visual Studio Debug Console. The title bar is dark teal with the text "C# Microsoft Visual Studio Debug Console". The console area has a black background with white text. It shows a prompt "Enter number of any digit:" followed by the input "11245" and the output "Reverse of 11245 is 54211".

```
C# Microsoft Visual Studio Debug Console
Enter number of any digit:
11245
Reverse of 11245 is 54211
```

14) **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

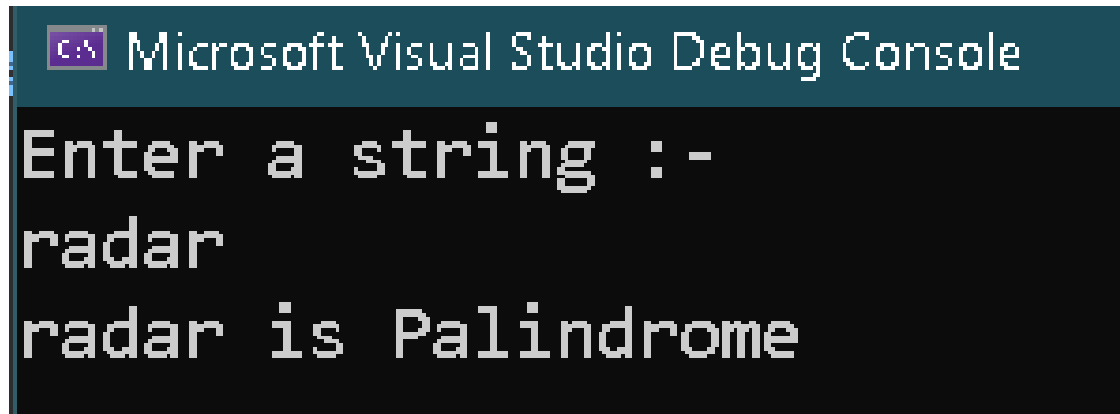
End While

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

End Sub

End Module

OUTPUT-15



```
C# Microsoft Visual Studio Debug Console
Enter a string :-
radar
radar is Palindrome
```

15) 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

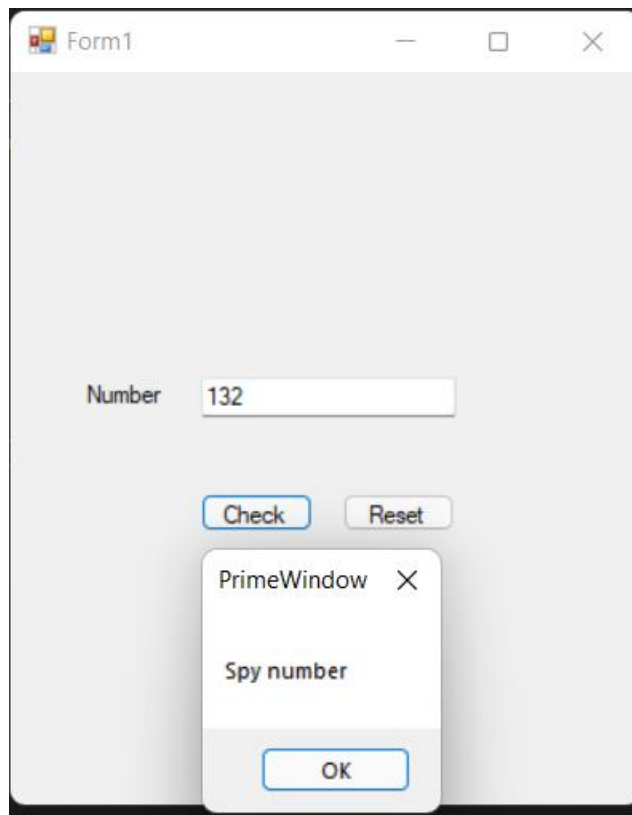
Console.WriteLine("Not Palindrome")

End If

End Sub

End Module

OUTPUT-16



16) 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



A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Users\Himan\source\repos\Fibo\Fibo\bin\Debug\Fibo.exe". The command prompt shows a series of numbers: 50, 1, 1, 2, 3, 5, 8, 13, 21, 34. The numbers are displayed in a monospaced font, and the cursor is positioned at the end of the last line.

```
C:\Users\Himan\source\repos\Fibo\Fibo\bin\Debug\Fibo.exe
50
1
1
2
3
5
8
13
21
34
```

17) 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

```
C:\Users\CG-DTE\source\repos\Conso
PASCAL'S TRIANGLE :-
      1
     1 1
    1 2 1
   1 3 3 1
  1 4 6 4 1
 1 5 10 10 5 1
1 6 15 20 15 6 1
```

18) 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()
```

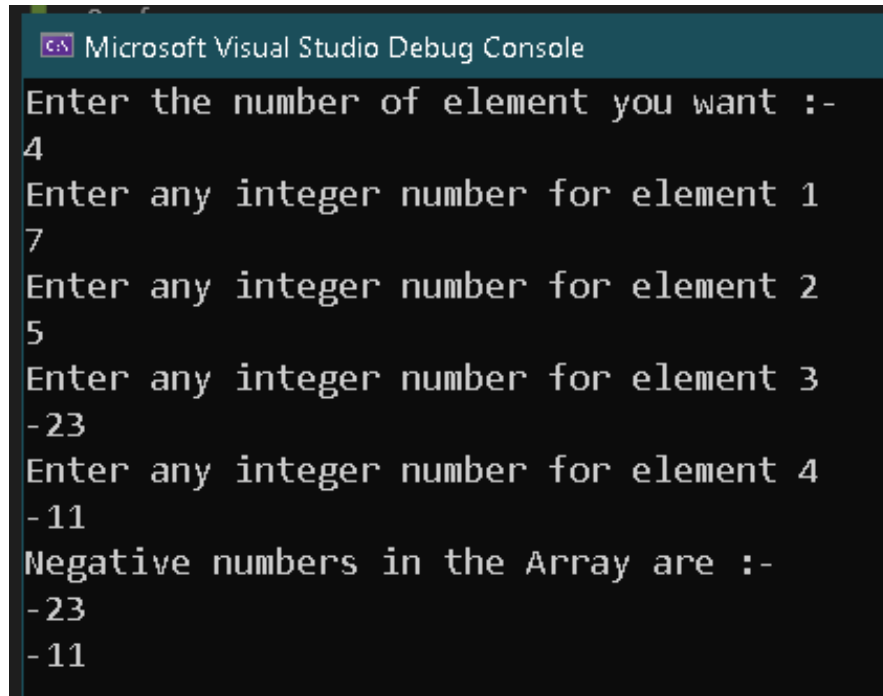
```
Next
```

```
Console.ReadLine()
```

```
End Sub
```

```
End Module
```

OUTPUT-19



```
Microsoft Visual Studio Debug Console
Enter the number of element you want :-
4
Enter any integer number for element 1
7
Enter any integer number for element 2
5
Enter any integer number for element 3
-23
Enter any integer number for element 4
-11
Negative numbers in the Array are :-
-23
-11
```

19) 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

Form1



FOOD ITEMS	PRICE	MODE OF PAYMENT
<input checked="" type="checkbox"/> PIZZA	Rs. 90/-	<input type="radio"/> CASH PAYMENT
<input type="checkbox"/> PASTA	Rs. 70/-	<input type="radio"/> PAYTM
<input type="checkbox"/> FRIES	Rs. 80/-	<input type="radio"/> GOOGLE PAY
<input type="checkbox"/> SANDWICH	Rs. 60/-	
<input checked="" type="checkbox"/> COKE	Rs. 50/-	

Order Confirmation

Order Confirmed. Please Select your mode of payment for payment of Rs.140

Form1



FOOD ITEMS	PRICE	MODE OF PAYMENT
<input checked="" type="checkbox"/> PIZZA	Rs. 90/-	<input type="radio"/> CASH PAYMENT
<input type="checkbox"/> PASTA	Rs. 70/-	<input checked="" type="radio"/> PAYTM
<input type="checkbox"/> FRIES	Rs. 80/-	<input type="radio"/> GOOGLE PAY
<input type="checkbox"/> SANDWICH	Rs. 60/-	
<input checked="" type="checkbox"/> COKE	Rs. 50/-	

Payment

Please do PAYTM of Rs. 140

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

Form1

Number 1 12

Number 2 12

Result 24

Add Subtract Multoly Divide Modulus Reset

21)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

```
Enter Matrix elements:
Enter element[0][0]: 1
Enter element[0][1]: 1
Enter element[0][2]: 1
Enter element[1][0]: 1
Enter element[1][1]: 1
Enter element[1][2]: 1
Enter element[2][0]: 1
Enter element[2][1]: 1
Enter element[2][2]: 1
Matrix elements:
1 1 1
1 1 1
1 1 1
Left Diagonal of Matrix:
1
    1
        1
Right Diagonal of Matrix:
        1
    1
1
```

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

```
Array before sorting
```

```
(7,3,5,8,9,2,7,)
```

```
Array after sorting
```

```
(2,3,5,7,7,8,9,)
```

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

 Microsoft Visual Studio Debug Console

```
Catch exception in a program Object reference not set to an instance of an object.  
Press any key to exit...
```

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

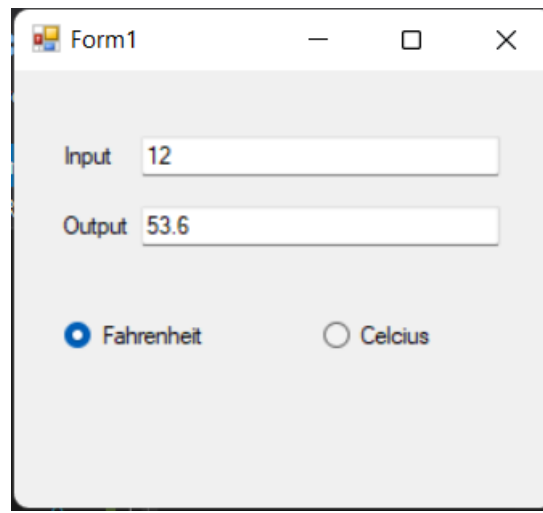
        Console.WriteLine(" Press any key to exit...")

        Console.ReadKey()

    End Sub

End Module
```

OUTPUT-25



The screenshot shows a standard Windows application window with the title bar 'Form1'. Inside the window, there is a light gray background. At the top, there are two text labels: 'Input' and 'Output'. Below 'Input' is a text box containing the number '12'. Below 'Output' is a text box containing the number '53.6'. At the bottom of the window, there are two radio buttons. The first radio button is selected (indicated by a blue dot) and is labeled 'Fahrenheit'. The second radio button is unselected and is labeled 'Celcius'.

Input	Output
12	53.6

☒ Fahrenheit ☐ Celcius

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
```

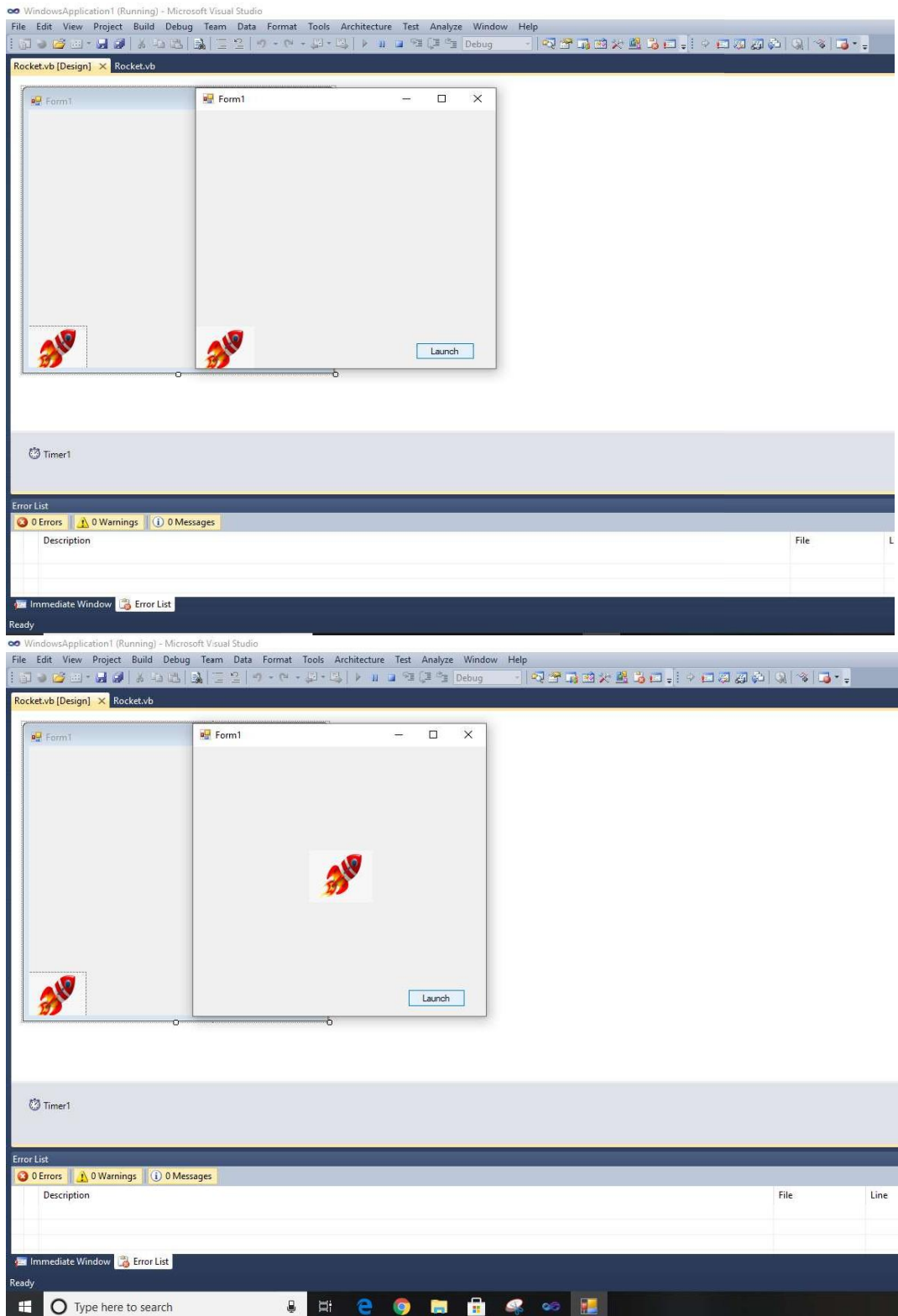
```
            TextBox2.Text = TextBox1.Text
```

```
        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
```

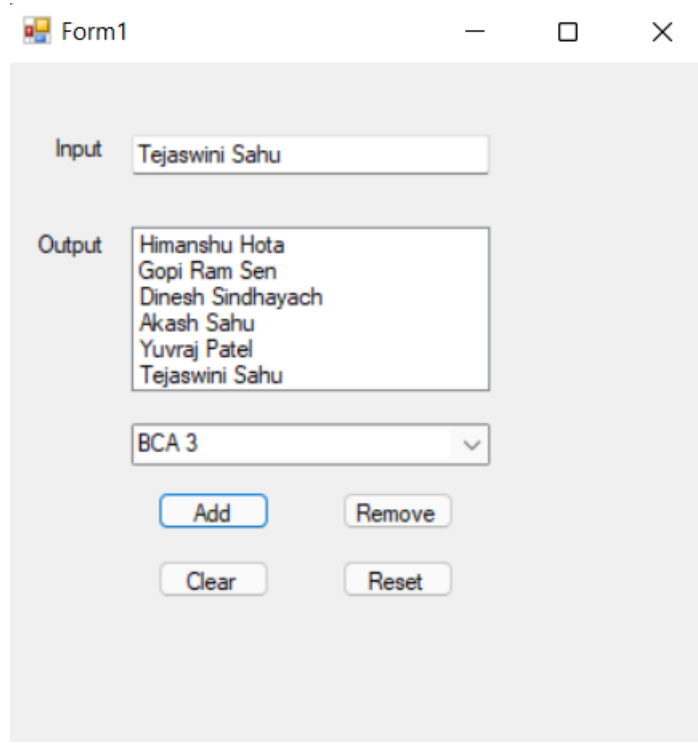
```
End Sub
```

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

```
Timer1.Start() End Sub
```

```
End Class
```

OUTPUT-27



The screenshot shows a Windows application window titled "Form1". Inside the window, there is a user interface for managing a list of names. It features an "Input" text box containing "Tejaswini Sahu", an "Output" list box containing a list of names, a dropdown menu set to "BCA 3", and four buttons: "Add", "Remove", "Clear", and "Reset".

Input: Tejaswini Sahu

Output:

- Himanshu Hota
- Gopi Ram Sen
- Dinesh Sindhayach
- Akash Sahu
- Yuvraj Patel
- Tejaswini Sahu

BCA 3

Add Remove

Clear Reset

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

```
Before Preserving the Elements
Days Name in [0] index is Sunday
Days Name in [1] index is Monday
Days Name in [2] index is Tuesday

After Preserving 0 to 2 index Elements
Days Name in [0] index is Sunday
Days Name in [1] index is Monday
Days Name in [2] index is Tuesday
Days Name in [3] index is Wednesday
Days Name in [4] index is Thursday
Days Name in [5] index is Friday
Days Name in [6] index is Saturday
Press any key to exit...
```

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

```
x = 15 y = 15  
Addition is 30  
Subtraction is 0
```

```
■
```

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

```
Enter any Number: 5  
Factorial of 5 is: 120_
```

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

```
1 Enter radius:- 5
2 CIRCLE
3 Radius of circle:- 5
4 Area of circle:- 78.5
5
6
7
8
```

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

```
1 Enter radius:- 5
5 CIRCLE
5 Radius of circle:- 5
Area of circle:- 78.5
_
```

32) Derive a class sphere from class circle; provide member function to calculate volume. Derive class 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()

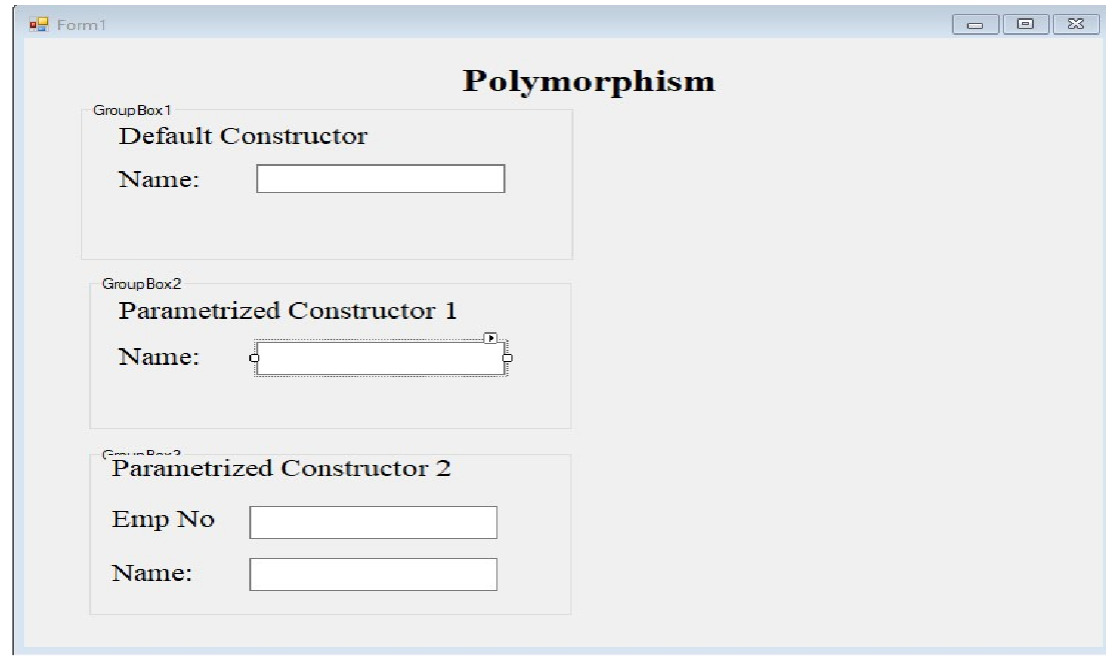
betichod.area()

Console.ReadLine()

End Sub

End Module

OUTPUT-33



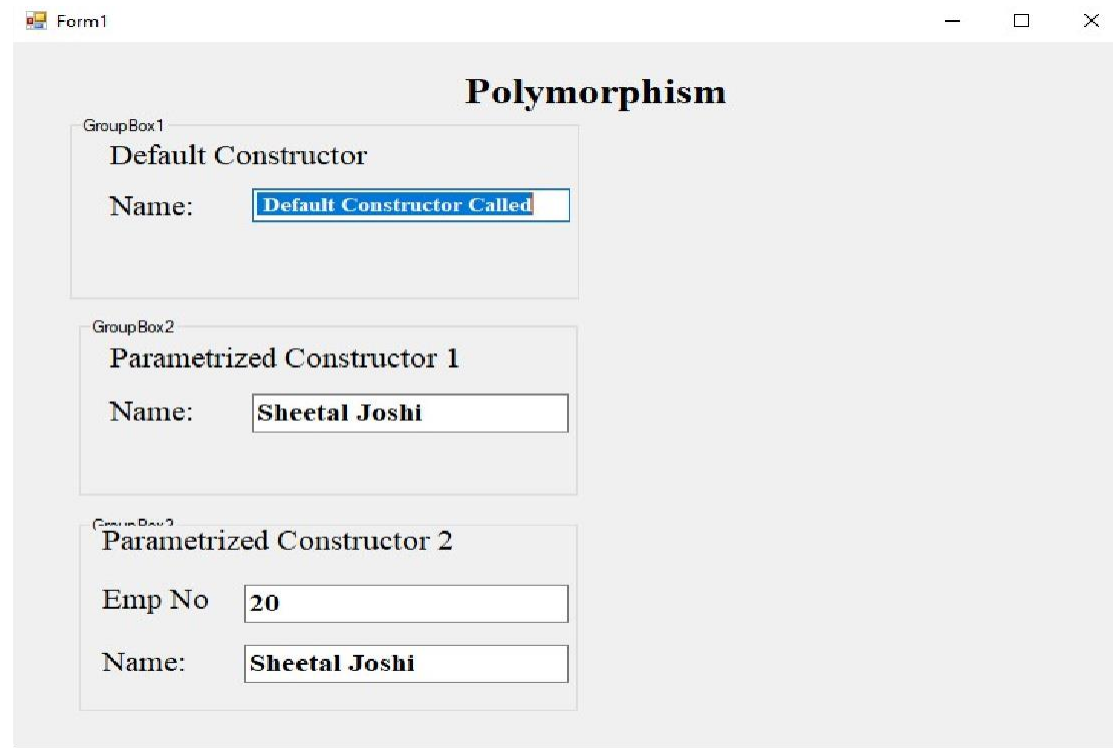
Form1

Polymorphism

GroupBox1
Default Constructor
Name:

GroupBox2
Parametrized Constructor 1
Name:

GroupBox3
Parametrized Constructor 2
Emp No
Name:



Form1

Polymorphism

GroupBox1
Default Constructor
Name:

GroupBox2
Parametrized Constructor 1
Name:

GroupBox3
Parametrized Constructor 2
Emp No
Name:

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")
```

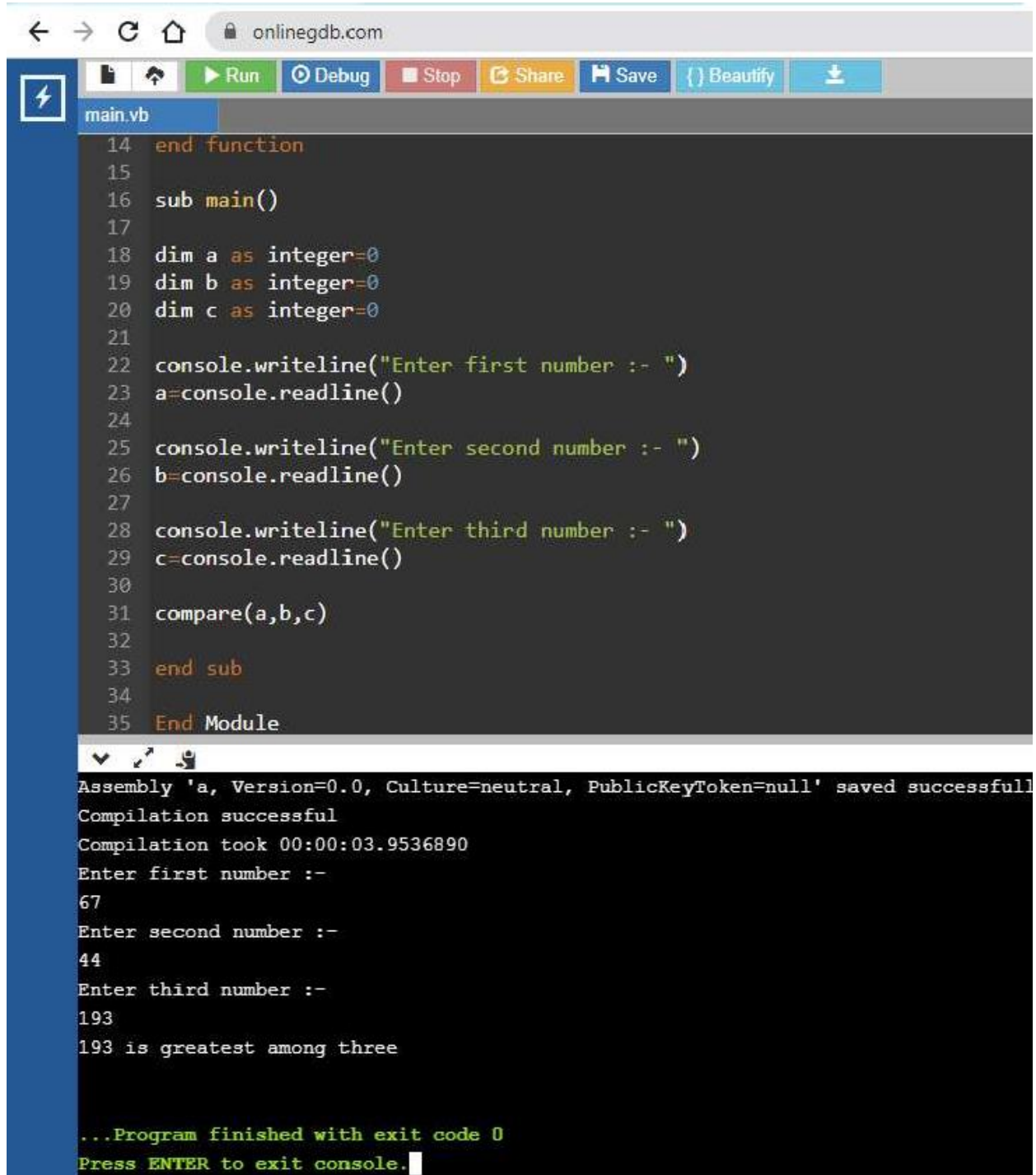
```
Dim obj2 As New Employees("20", "Sheetal Joshi") End Sub
```

```
Private Sub TextBox2_TextChanged(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles TextBox2.TextChanged
```

```
End Sub
```

```
End Class
```

OUTPUT-34



The screenshot shows a web-based IDE for VB.NET. The browser address bar shows 'onlinegdb.com'. The IDE interface includes a toolbar with buttons for Run, Debug, Stop, Share, Save, Beautify, and a download icon. A file explorer on the left shows 'main.vb'. The code editor contains the following VB.NET code:

```
14 end function
15
16 sub main()
17
18     dim a as integer=0
19     dim b as integer=0
20     dim c as integer=0
21
22     console.writeline("Enter first number :- ")
23     a=console.readline()
24
25     console.writeline("Enter second number :- ")
26     b=console.readline()
27
28     console.writeline("Enter third number :- ")
29     c=console.readline()
30
31     compare(a,b,c)
32
33 end sub
34
35 End Module
```

Below the code editor, the console output is displayed:

```
Assembly 'a, Version=0.0, Culture=neutral, PublicKeyToken=null' saved successfully
Compilation successful
Compilation took 00:00:03.9536890
Enter first number :-
67
Enter second number :-
44
Enter third number :-
193
193 is greatest among three

...Program finished with exit code 0
Press ENTER to exit console.
```

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

```
ENTER ROLL NO:-  
16  
ENTER NAME:-  
KIRTI  
ENTER MARKS IN ENGLISH,MATHEMATICS,PHYSICS RESPECTIVELY:-  
98  
97  
95  
SUBJECT NAME      MAX MARKS      MIN MARKS      OBT MARKS  
ENGLISH           100           33           98  
MATHEMATICS       100           33           97  
PHYSICS           100           33           95  
TOTAL=290  
PERCENTAGE IS=97
```

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()

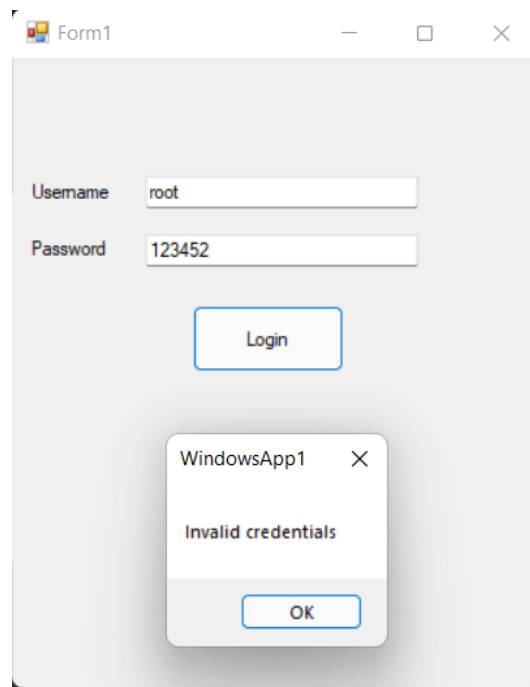
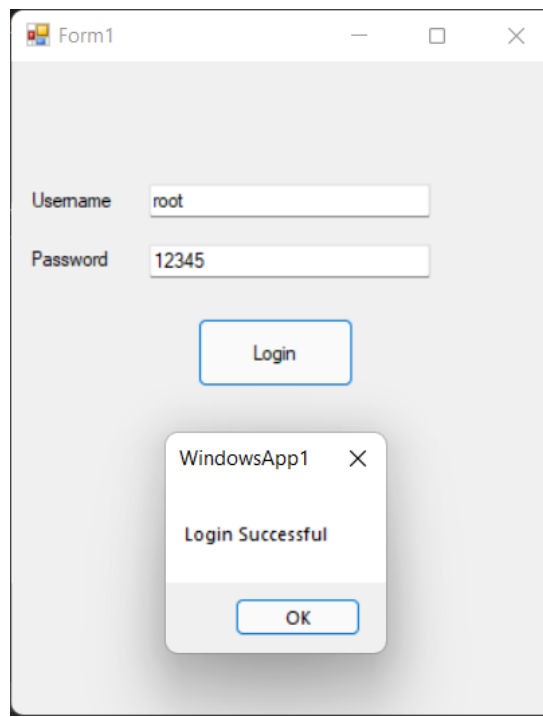
obj.cal()

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

CRUD Operations

	ContactID	Firstname	Lastname
	1	John	Smith
	2	Richard	Anderson
▶	3	John	Wick

Contact ID:

Firstname:

Lastname:

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

Form1

ID 1

First Name Radhika

Last Name Agarwal

Age 21

Insert **Delete** **Update**

database

Record Saved

OK

myPCWallpaper.com

Form1

ID 2

First Name Sheetal

Last Name Mehta

Age 20

Insert **Delete** **Update**

database

Record updated

OK

myPCWallpaper.com

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()
```

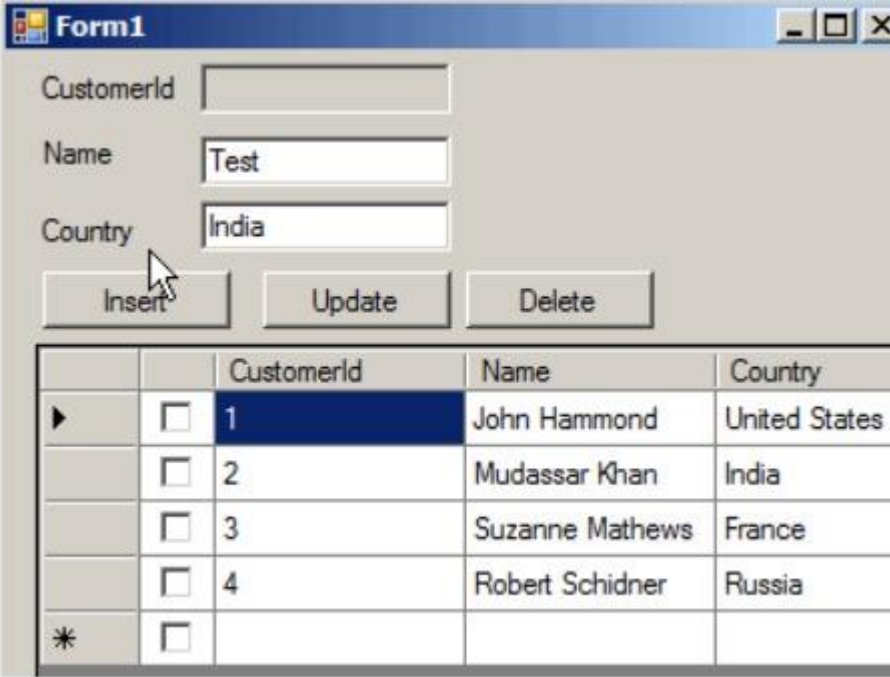
```
Catch ex As Exception MsgBox(ex.Message)
```

```
End Try End Sub
```

```
End Class
```

OUTPUT:39

Insert



Form1


CustomerId

Name

Country

		CustomerId	Name	Country
▶	<input type="checkbox"/>	1	John Hammond	United States
	<input type="checkbox"/>	2	Mudassar Khan	India
	<input type="checkbox"/>	3	Suzanne Mathews	France
	<input type="checkbox"/>	4	Robert Schidner	Russia
*	<input type="checkbox"/>			

Update



Form1

CustomerId

Name

Country

		CustomerId	Name	Country
	<input type="checkbox"/>	1	John Hammond	United States
	<input type="checkbox"/>	2	Mudassar Khan	India
	<input type="checkbox"/>	3	Suzanne Mathews	France
	<input type="checkbox"/>	4	Robert Schidner	Russia
▶	<input checked="" type="checkbox"/>	17	Test	India

39) Design window application to insert, update and delete operation on table using Data grid 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

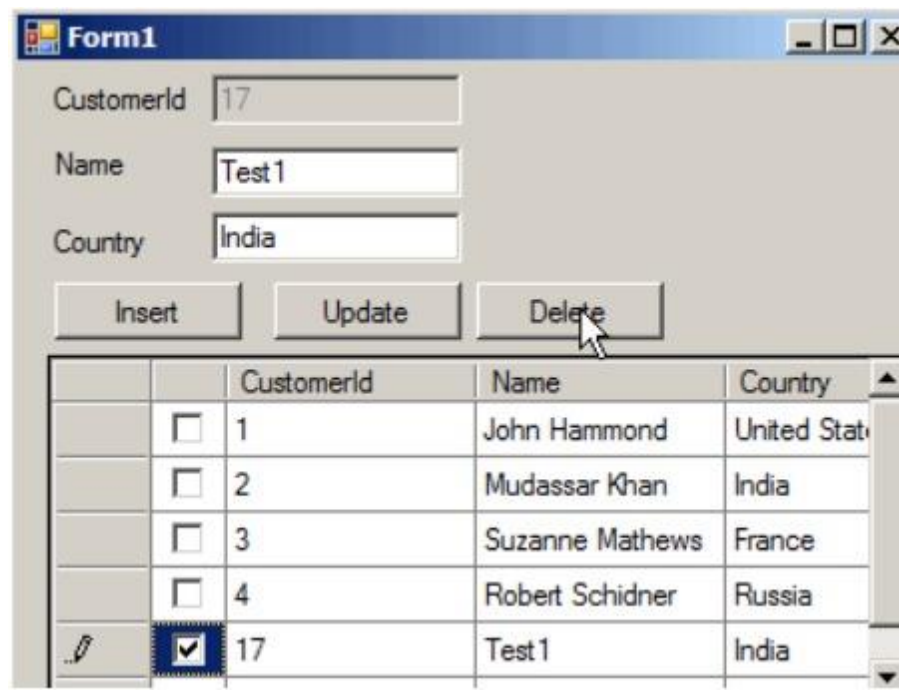
    Private Sub Form1_Load(sender As System.Object, e As System.EventArgs) Handles
MyBase.Load

        con.Open()
        MsgBox("DATABASE CONNECTION SUCCEEDED")
        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 = " "
```

Delete



The screenshot shows a Windows application window titled "Form1". It contains three text input fields: "CustomerId" with the value "17", "Name" with the value "Test1", and "Country" with the value "India". Below these fields are three buttons: "Insert", "Update", and "Delete". A mouse cursor is pointing at the "Delete" button. Below the buttons is a table with five columns: an empty column, a checkbox column, and three columns labeled "CustomerId", "Name", and "Country". The table contains five rows of data. The last row, with CustomerId "17", Name "Test1", and Country "India", has its checkbox checked. The first four rows have unchecked checkboxes.

		CustomerId	Name	Country
	<input type="checkbox"/>	1	John Hammond	United States
	<input type="checkbox"/>	2	Mudassar Khan	India
	<input type="checkbox"/>	3	Suzanne Mathews	France
	<input type="checkbox"/>	4	Robert Schidner	Russia
	<input checked="" type="checkbox"/>	17	Test1	India

```
End If con.Close()
```

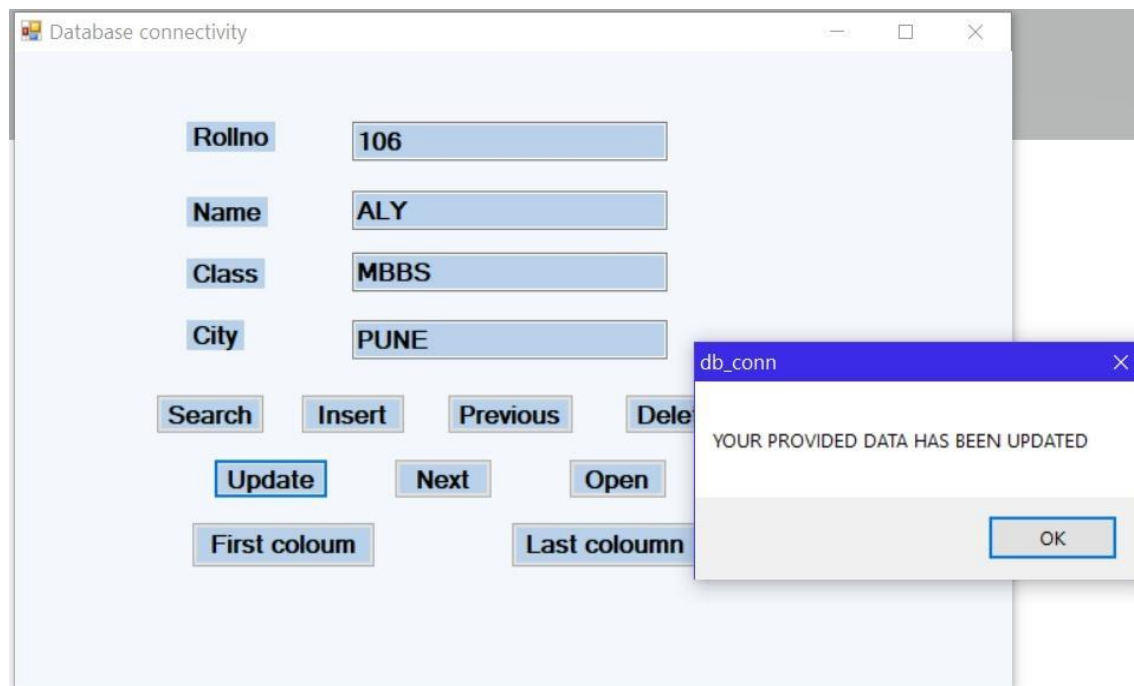
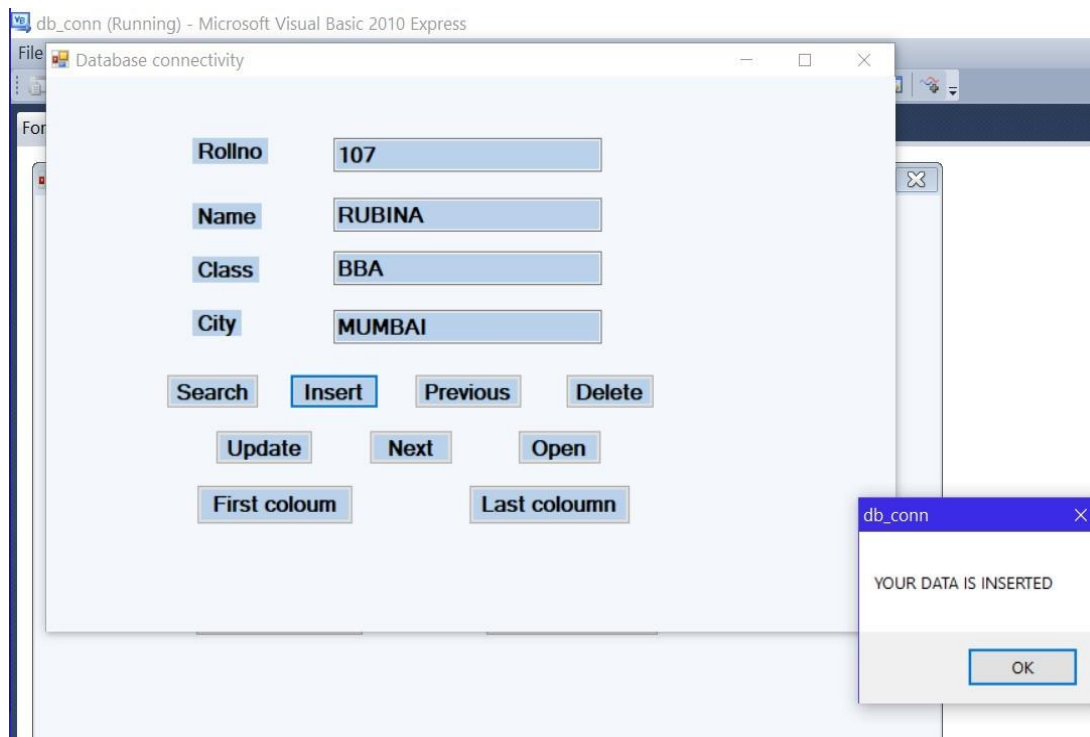
```
End Sub
```

```
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 SUCCEEDED")
```

```
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
```