

NAME:- BHATT MUDIT M.

SUBJECT:-.NET PROGRAMMING

ENROLLMENT NO. :- 209830307018

PRACTICAL 1

Introduction to VB.NET

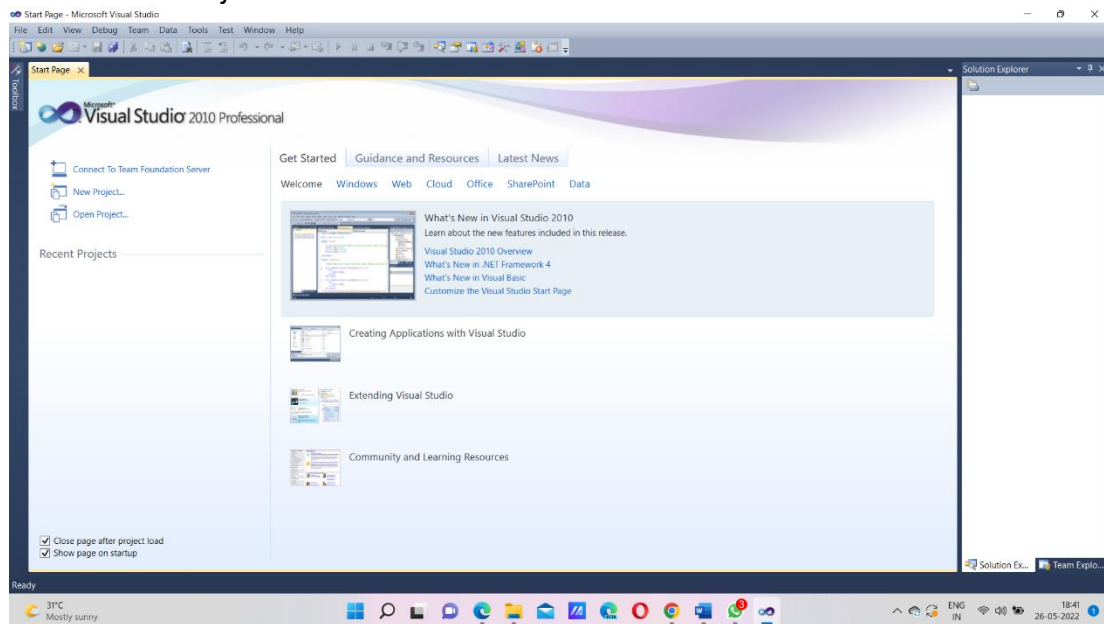
1} Visual .NET and Hands On to Create, Save and Open the Project.

»solution

-»Open visual studio 2010.

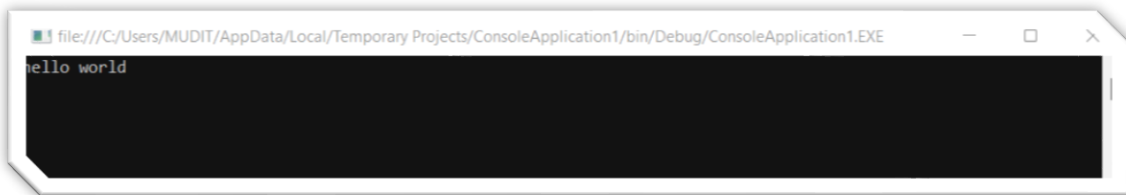
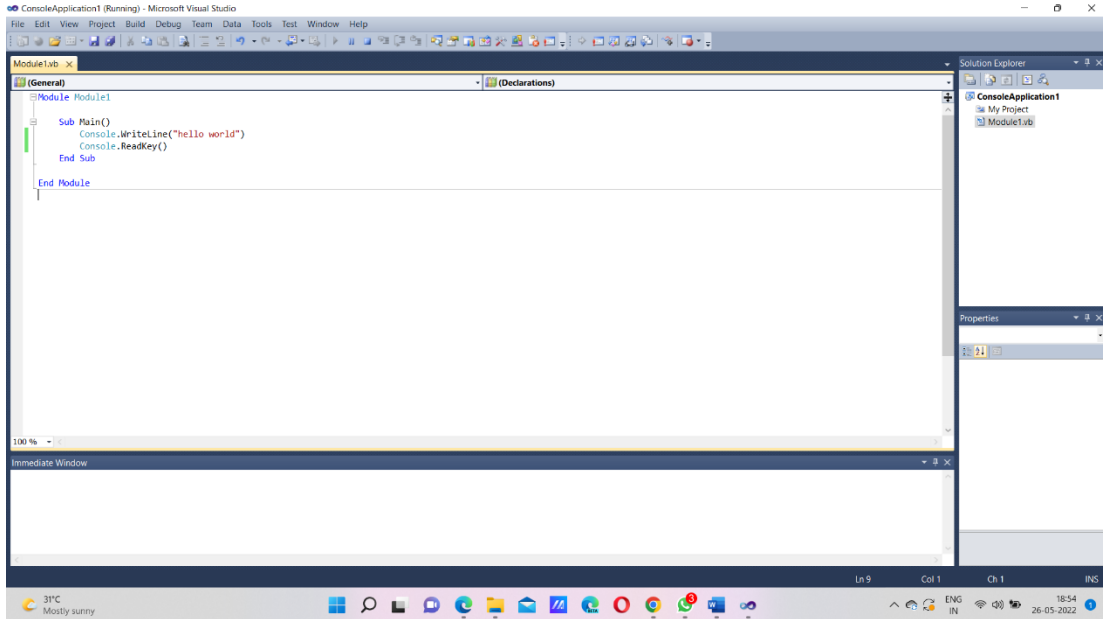
-»Choose “New Project”.

-»Select The Project To Perform.



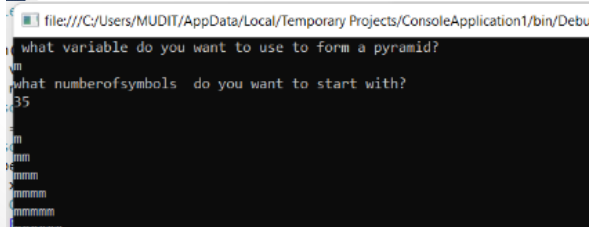
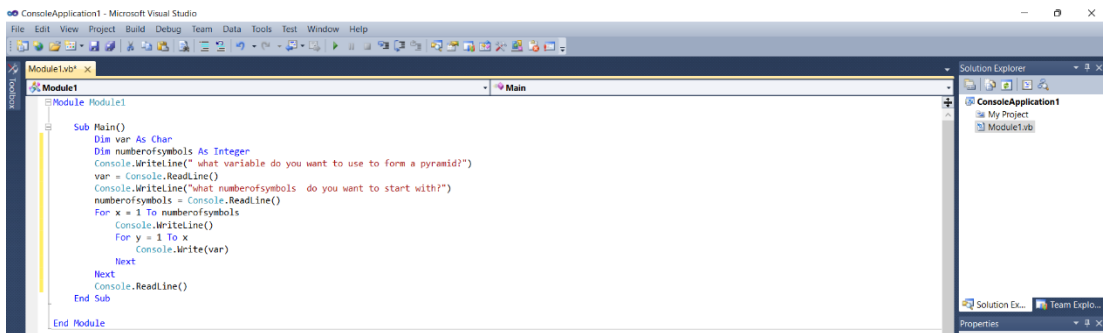
2} Write Console Application to print Hello World.

»solution



3} Write, Test and Debug Program to Print Half Pyramid using Loop.

»solution



4} Write, Test and Debug Program to use following Operators.

-»1 **Arithmetic Operator.**

-»2 **BITSHIFT Operator.**

-»1 Arithmetic Operator.

»solution

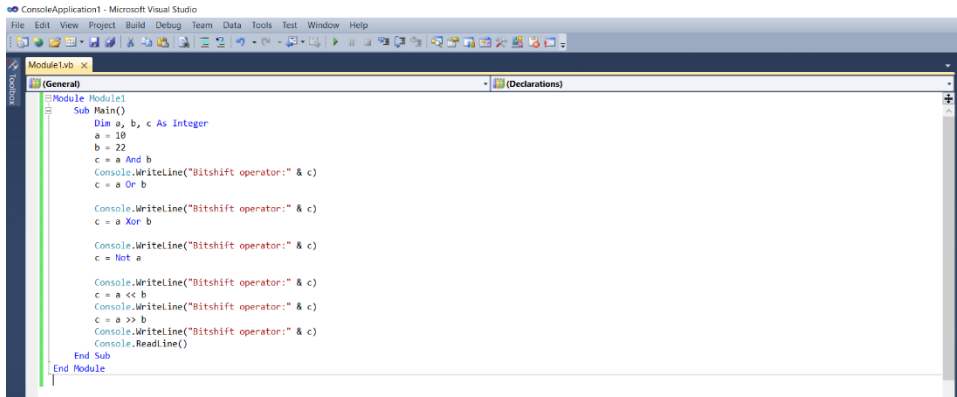
The screenshot displays the Microsoft Visual Studio IDE. The main editor window shows a C# program in a file named `Module1.cs`. The code defines a `Main` method where several integer variables (`a`, `b`, `p`, `c`, `d`) are declared and assigned values. It then performs a series of arithmetic operations on these variables and prints the results of each operation to the console using `Console.WriteLine`. The operations include addition, subtraction, multiplication, division, modulus, and exponentiation. The `Properties` window on the right shows the `ConsoleApplication1` project. Below the IDE, a separate window shows the output of the program, displaying the results of the arithmetic operations for each line of code.

```
Sub Main()  
    Dim a As Integer = 21  
    Dim b As Integer = 10  
    Dim p As Integer = 2  
    Dim c As Integer  
    Dim d As Single  
    c = a + b  
    Console.WriteLine("Line 1 - Value of c is {0}", c)  
    c = a - b  
    Console.WriteLine("Line 2 - Value of c is {0}", c)  
    c = a * b  
    Console.WriteLine("Line 3 - Value of c is {0}", c)  
    d = a / b  
    Console.WriteLine("Line 4 - Value of d is {0}", d)  
    Console.WriteLine("Line 5 - Value of c is {0}", c)  
    c = a Mod b  
    Console.WriteLine("Line 6 - Value of c is {0}", c)  
    c = b ^ p  
    Console.WriteLine("Line 7 - Value of c is {0}", c)  
    Console.ReadLine()  
End Sub  
End Module
```

Line 1 - Value of c is 31
Line 2 - Value of c is 11
Line 3 - Value of c is 210
Line 4 - Value of d is 2.1
Line 5 - Value of c is 2
Line 6 - Value of c is 1
Line 7 - Value of c is 100

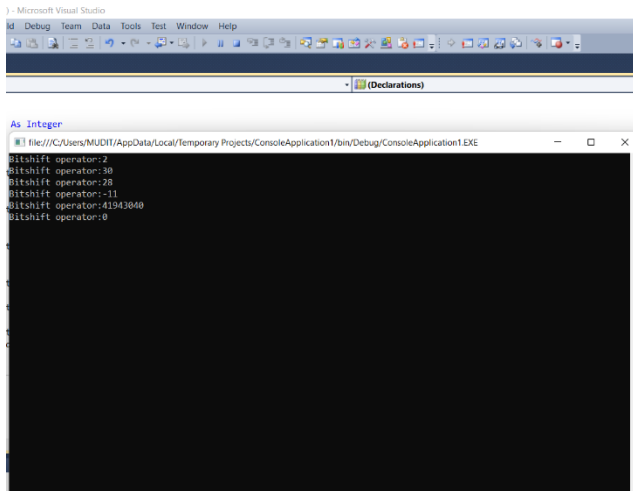
-»2 BITSHIFT Operator

»solution



```

Module1
Sub Main()
    Dim a, b, c As Integer
    a = 10
    b = 22
    c = a And b
    Console.WriteLine("Bitshift operator:" & c)
    c = a Or b
    Console.WriteLine("Bitshift operator:" & c)
    c = a Xor b
    Console.WriteLine("Bitshift operator:" & c)
    c = Not a
    Console.WriteLine("Bitshift operator:" & c)
    c = a << b
    Console.WriteLine("Bitshift operator:" & c)
    c = a >> b
    Console.WriteLine("Bitshift operator:" & c)
    Console.ReadLine()
End Sub
End Module
    
```



```

As Integer
file:///C:/Users/MUDIT/AppData/Local/Temporary Projects/ConsoleApplication1/bin/Debug/ConsoleApplication1.EXE
Bitshift operator:2
Bitshift operator:30
Bitshift operator:30
Bitshift operator:11
Bitshift operator:41943040
Bitshift operator:0
    
```

5)Write, Test and Debug Program for following Array.

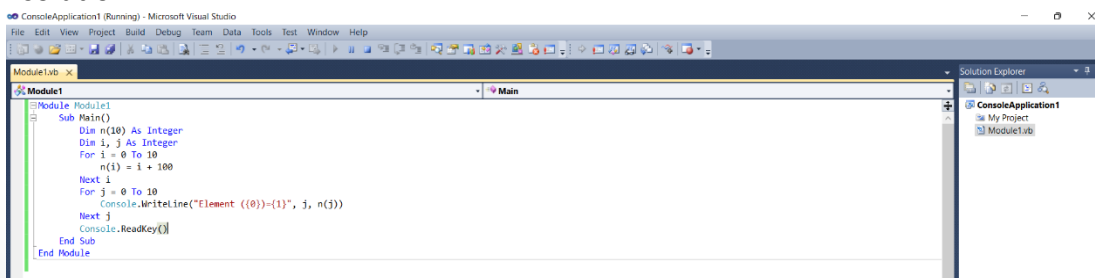
1->One Dimensional Array

2-> Two Dimensional Array

3-> Dynamic Array

1->One Dimensional Array

»solution



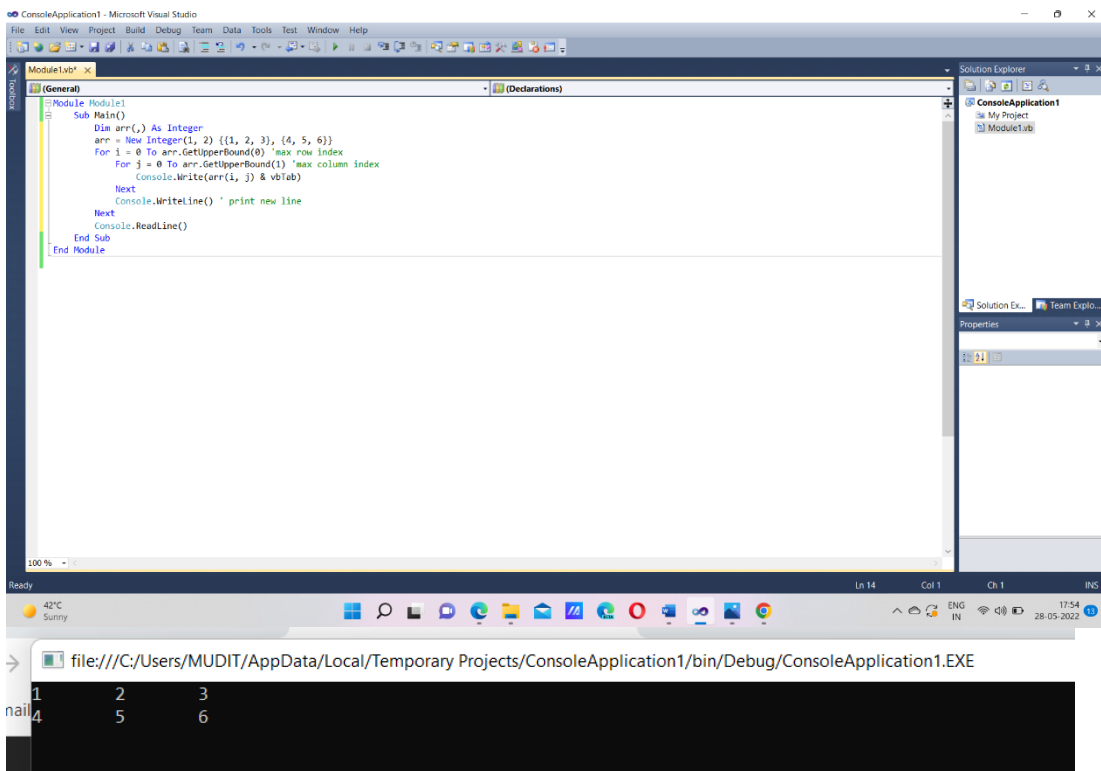
```

Module1
Sub Main()
    Dim n(10) As Integer
    Dim i, j As Integer
    For i = 0 To 10
        n(i) = i + 100
    Next i
    For j = 0 To 10
        Console.WriteLine("Element {(0)}-{1}", j, n(j))
    Next j
    Console.ReadKey()
End Sub
End Module
    
```

```
file:///C:/Users/MUDIT/AppData/Local/Temporary Projects/ConsoleApplication1/bin/Debug/ConsoleApplication1.EXE
Element (0)=100
Element (1)=101
Element (2)=102
Element (3)=103
Element (4)=104
Element (5)=105
Element (6)=106
Element (7)=107
Element (8)=108
Element (9)=109
Element (10)=110
```

2-> Two Dimensional Array

»solution



The screenshot shows the Visual Studio IDE with a C# console application. The code defines a 2D array and iterates through it to print its elements. The output window shows the array's contents in a tabular format.

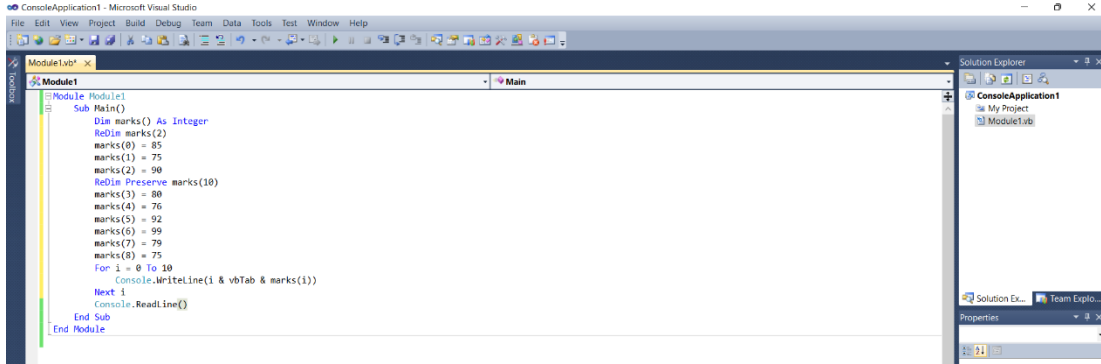
```
Module1.vb
Sub Main()
    Dim arr(,) As Integer
    arr = New Integer(1, 2) {{1, 2, 3}, {4, 5, 6}}
    For i = 0 To arr.GetUpperBound(0) 'max row index
        For j = 0 To arr.GetUpperBound(1) 'max column index
            Console.Write(arr(i, j) & vbTab)
        Next
        Console.WriteLine() ' print new line
    Next
    Console.ReadLine()
End Sub
End Module
```

Output:

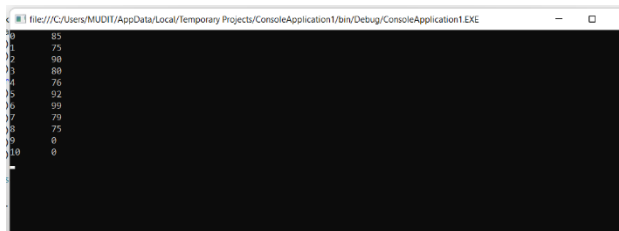
```
1      2      3
4      5      6
```

3-> Dynamic Array

»solution



```
Module1
Sub Main()
    Dim marks() As Integer
    ReDim marks(2)
    marks(0) = 85
    marks(1) = 75
    marks(2) = 90
    ReDim Preserve marks(10)
    marks(3) = 88
    marks(4) = 76
    marks(5) = 92
    marks(6) = 99
    marks(7) = 79
    marks(8) = 75
    For i = 0 To 10
        Console.WriteLine(i & vbTab & marks(i))
    Next i
    Console.ReadLine()
End Sub
End Module
```



```
0 85
1 75
2 90
3 88
4 76
5 92
6 99
7 79
8 75
9 0
10 0
```