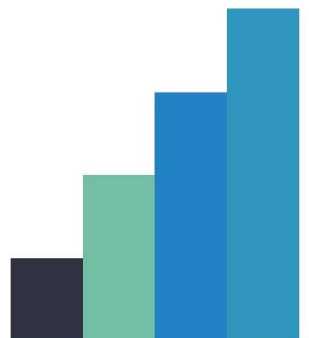


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SUBJECT: .NET Programming

Sr No.	Program
1	Visual .NET and Hands on to Create, Save and Open the Project.
2	Write a Console Application to Print "HELLO WORLD".
3	Write, Test and Debug Program to Print Half Pyramid using Loop.
4	Write, Test and Debug Program to use following Operators. 1. Arithmetic Operator. 2. BITSHIFT Operator.
5	Write, Test and Debug Program for following Array. 1. One-Dimensional Array 2. Two-Dimensional Array 3. Dynamic Array

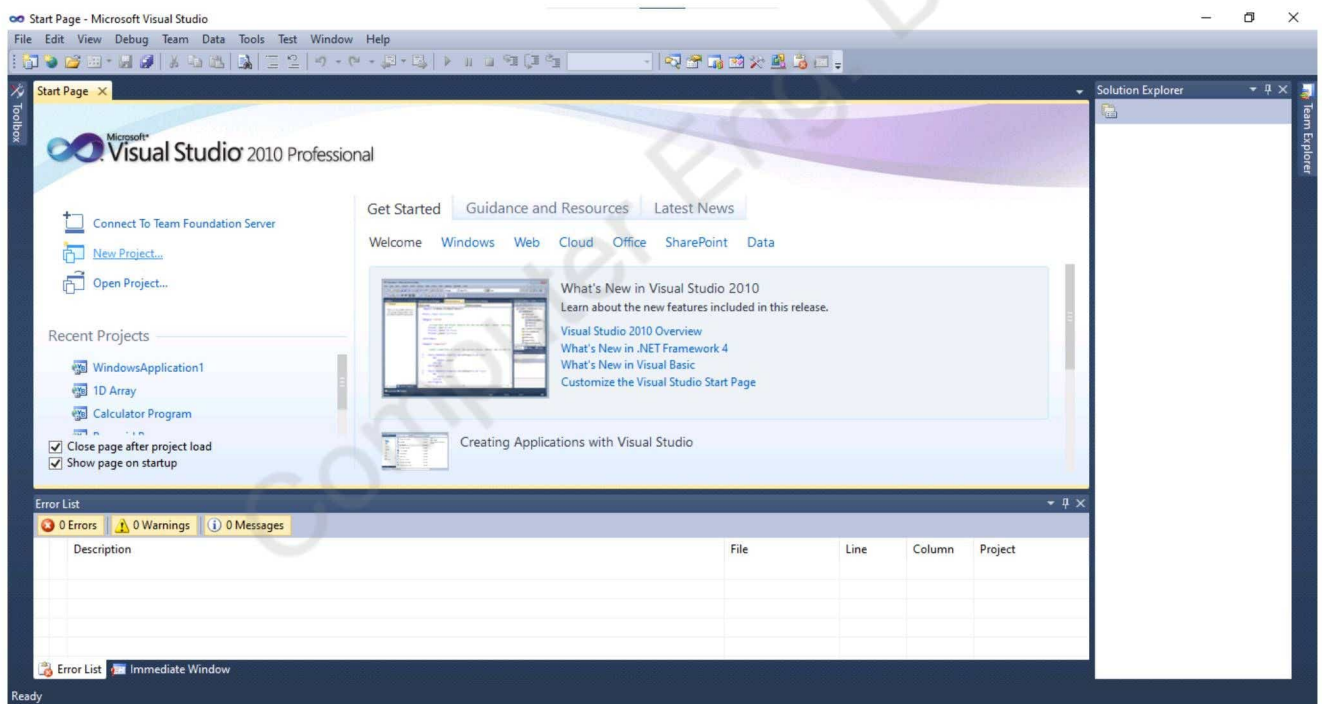


PRACTICAL 1

INTRODUCTION TO .NET

1. Visual .NET and Hands on Create, Save and Open the Project.

- Open Visual Studio 2010
- Choose “New Project”
- Select a project to perform



2. Write Console Application to print “HELLO WORLD”.

```

(General)
Module Module1
    Sub Main()
        Console.WriteLine("HELLO WORLD")
        Console.ReadLine()
    End Sub
End Module

```

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```

HELLO WORLD

```

3. Write, Test and Debug program to print "Half Pyramid" using Loop.

```

(General)
Module Module1
    Sub Main()
        Dim a As Char
        Dim no As Integer
        Console.WriteLine("Enter variable for pyramid:")
        a = Console.ReadLine()
        Console.WriteLine("Enter number of symbols to print:")
        no = Console.ReadLine()
        For x = 1 To no
            Console.WriteLine()
            For y = 1 To x
                Console.Write(a)
            Next
        Next
        Console.ReadLine()
    End Sub
End Module

```

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```

Enter variable for pyramid:
M
Enter number of symbols to print:
6

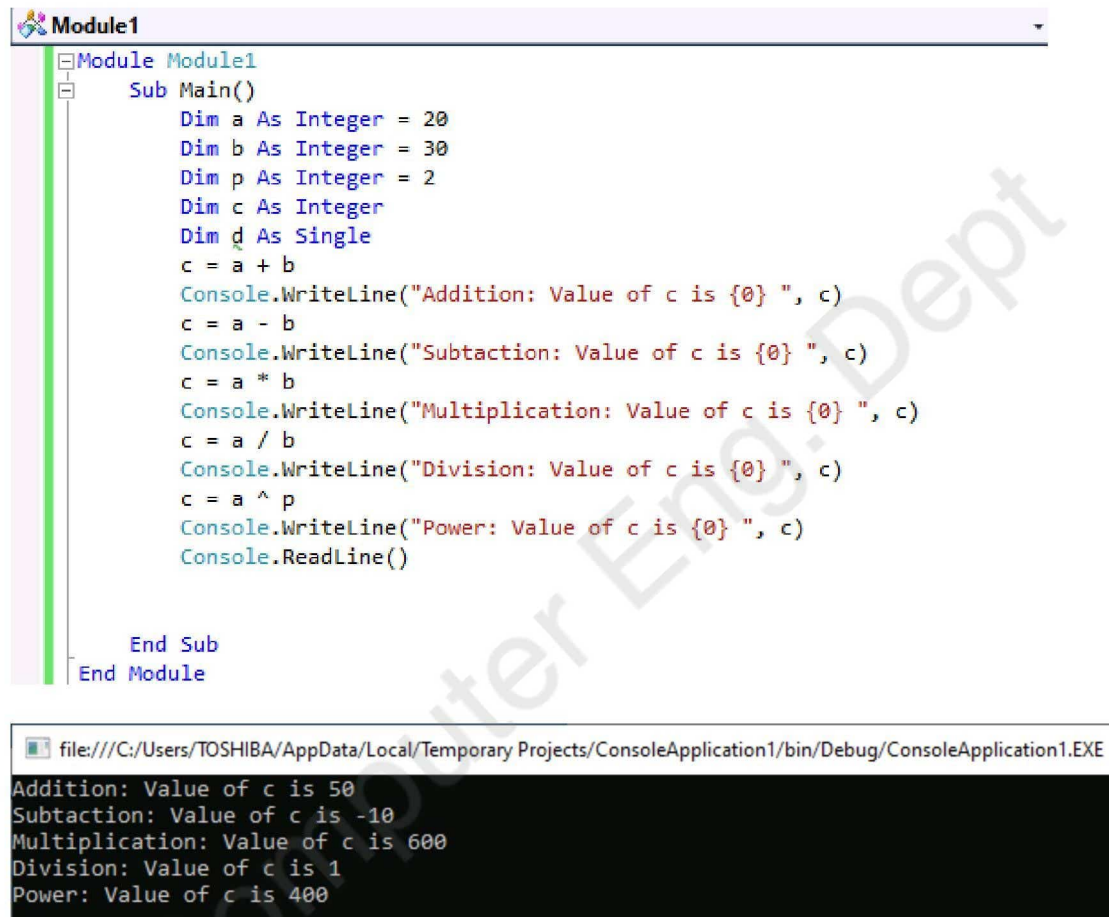
M
MM
MMM
MMMM
MMMMM
MMMMMM

```

3. Write, Test and Debug program to use following operators:

- Arithmetic Operators
- Bit-Shift Operators

Arithmetic operator:

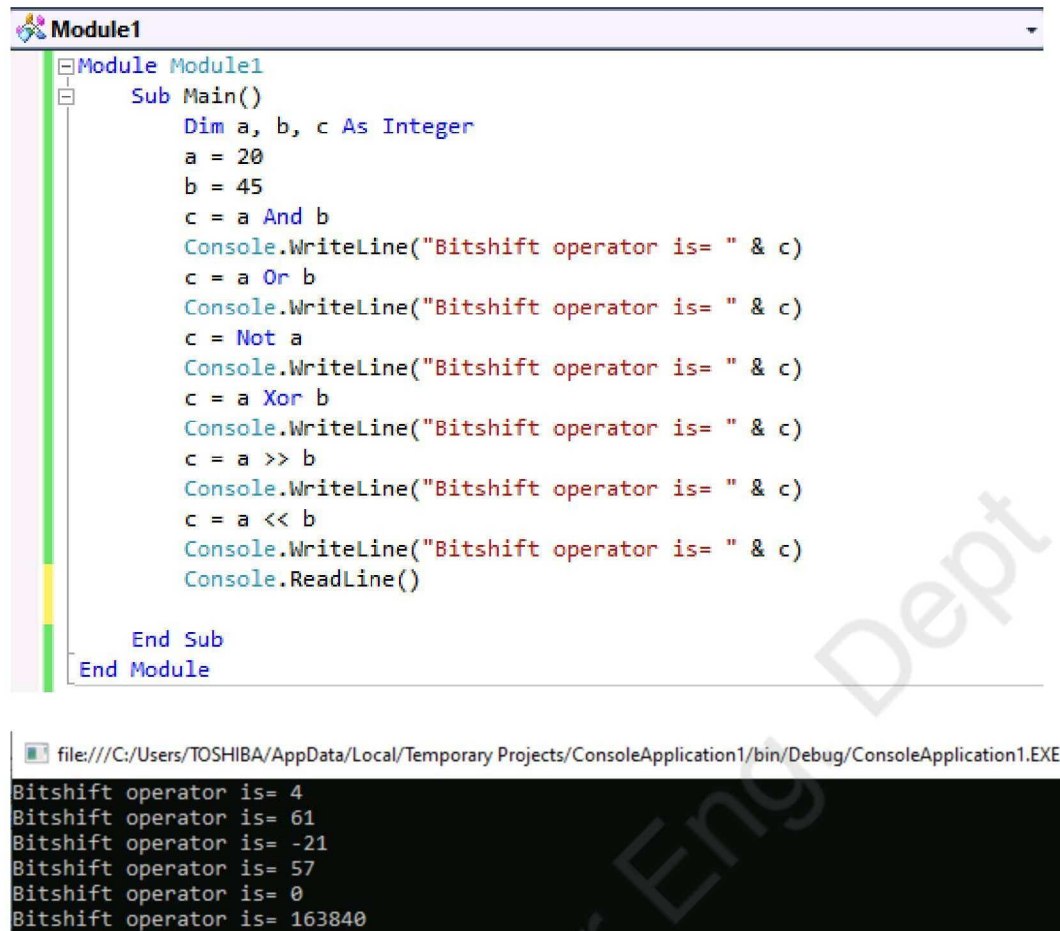


```
Module1
Sub Main()
    Dim a As Integer = 20
    Dim b As Integer = 30
    Dim p As Integer = 2
    Dim c As Integer
    Dim d As Single
    c = a + b
    Console.WriteLine("Addition: Value of c is {0} ", c)
    c = a - b
    Console.WriteLine("Subtaction: Value of c is {0} ", c)
    c = a * b
    Console.WriteLine("Multiplication: Value of c is {0} ", c)
    c = a / b
    Console.WriteLine("Division: Value of c is {0} ", c)
    c = a ^ p
    Console.WriteLine("Power: Value of c is {0} ", c)
    Console.ReadLine()
End Sub
End Module
```

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```
Addition: Value of c is 50
Subtaction: Value of c is -10
Multiplication: Value of c is 600
Division: Value of c is 1
Power: Value of c is 400
```

Bit-Shift operator:



The screenshot displays a Visual Studio code editor window titled 'Module1'. The code is written in VB.NET and demonstrates various bitshift operations. It defines three integer variables: 'a' (20), 'b' (45), and 'c'. The program performs the following operations and prints the result of 'c' after each:

- `c = a And b`: Bitwise AND operation, result is 4.
- `c = a Or b`: Bitwise OR operation, result is 61.
- `c = Not a`: Bitwise NOT operation, result is -21.
- `c = a Xor b`: Bitwise XOR operation, result is 57.
- `c = a >> b`: Right shift operation, result is 0.
- `c = a << b`: Left shift operation, result is 163840.

The console output at the bottom of the window shows the results of these operations:

```
Bitshift operator is= 4
Bitshift operator is= 61
Bitshift operator is= -21
Bitshift operator is= 57
Bitshift operator is= 0
Bitshift operator is= 163840
```

5. Write, Test and Debug program for array:

- One-Dimensional Array
- Two-Dimensional Array
- Dynamic Array

One-Dimensional Array:

```

Module1
Module Module1

    Sub Main()
        Dim n(10) As Integer
        Dim i, j As Integer

        For i = 0 To 10
            n(i) = i + 20
        Next i

        For j = 0 To 10
            Console.WriteLine("elements{0}={1}", j, n(j))
        Next j

        Console.ReadKey()
    End Sub
End Module

```

Two-Dimensional Array:

```

Module1
Module Module1

    Sub Main()
        Dim arr(,) As Integer
        arr = New Integer(1, 2) {{1, 2, 3}, {4, 5, 6}}
        For i = 0 To arr.GetUpperBound(0) 'maxrow
            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

```

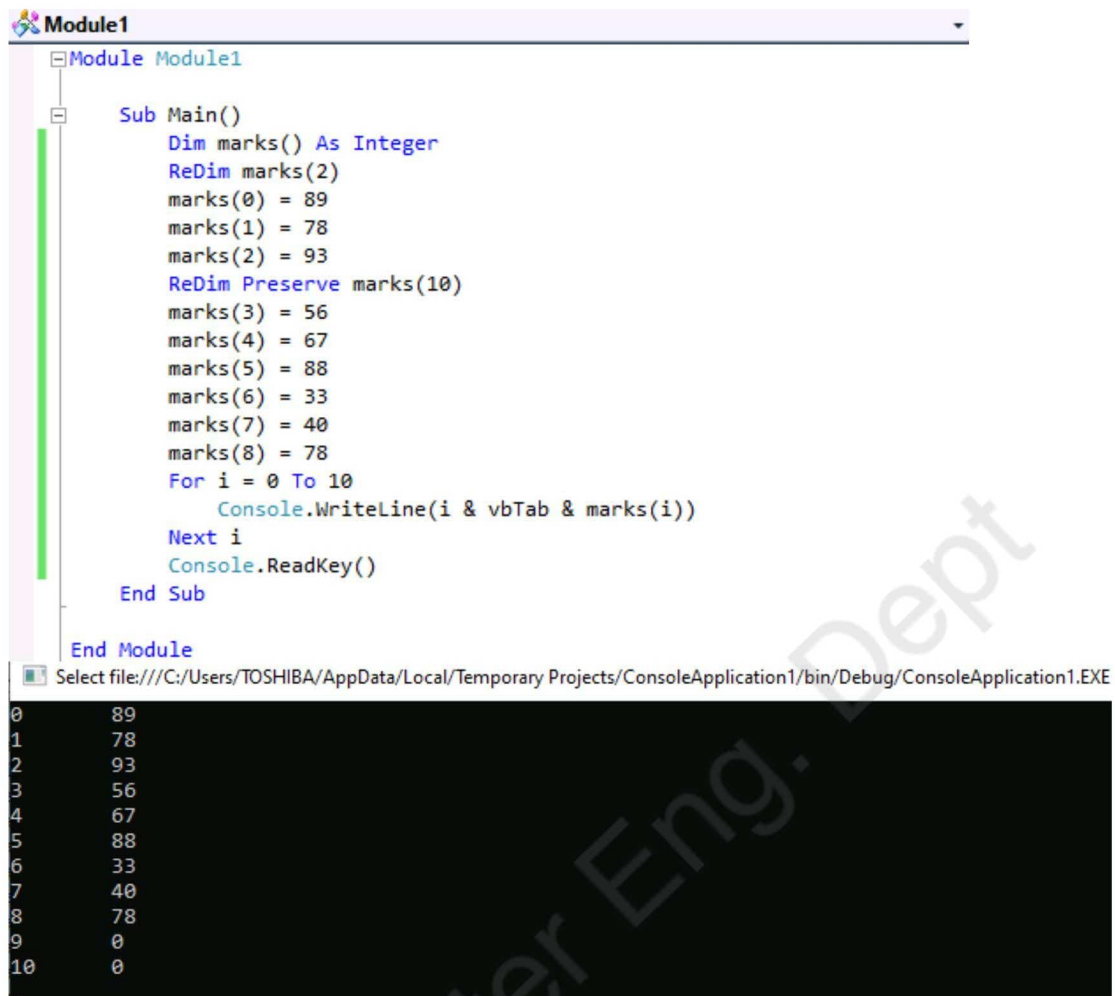
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```

1      2      3
4      5      6

```

Dynamic Array:



```
Module1
Module Module1

    Sub Main()
        Dim marks() As Integer
        ReDim marks(2)
        marks(0) = 89
        marks(1) = 78
        marks(2) = 93
        ReDim Preserve marks(10)
        marks(3) = 56
        marks(4) = 67
        marks(5) = 88
        marks(6) = 33
        marks(7) = 40
        marks(8) = 78
        For i = 0 To 10
            Console.WriteLine(i & vbTab & marks(i))
        Next i
        Console.ReadKey()
    End Sub

End Module
```

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0	89
1	78
2	93
3	56
4	67
5	88
6	33
7	40
8	78
9	0
10	0