


## Example No 01

### Input:

```
using System;

namespace Abdullah_Sadiq_CP_Lab_04
{
    class Program
    {
        static void Main(string[] args)
        {
            int a = 5, b = 4;
            Console.WriteLine("The value of a+b is\t:{0}", a + b);
            Console.WriteLine("The value of a+(b++) is\t:{0}", a + (b++));
            Console.WriteLine("The value of a+b is\t:{0}", a + b);
            Console.WriteLine("The value of a(++b) is\t:{0}", a + (++b));
            Console.WriteLine("The value of a+b is\t:{0}", a + b);
            Console.WriteLine("The value of 14/a is\t:{0}", 14 / a);
            Console.WriteLine("The value of 14%a is\t:{0}", 14 % a);
        }
    }
}
```

### Output:



```
Microsoft Visual Studio Debug Console

The value of a+b is      :9
The value of a+(b++) is :9
The value of a+b is      :10
The value of a(++b) is :11
The value of a+b is      :11
The value of 14/a is     :2
The value of 14%a is     :4

C:\Users\ESHOP\source\repos\Abdullah Sadiq CP Lab 04\Abdullah Sadiq CP Lab 04\bin\Debug\netcoreapp3.1\Abdullah Sadiq CP Lab 04.exe (process 13460) exited with code 0.
Press any key to close this window . . .
```

## Example No 02

### Input:

```
using System;

namespace Abdullah_Sadiq_CP_Lab_04
{
    class Program
    {
        static void Main(string[] args)
        {
            bool a = true;
            bool b = false;
            Console.WriteLine(a && b);
            Console.WriteLine(a || b);
            Console.WriteLine(!b);
            Console.WriteLine(b || true);
            Console.WriteLine((5 > 7) ^ (a == b));
        }
    }
}
```

## Output:

```
C:\> Microsoft Visual Studio Debug Console

False
True
True
True
False

C:\Users\ESHOP\source\repos\Abdullah Sadiq CP Lab 04\Abdullah Sadiq CP Lab 04\
Lab 04.exe (process 3700) exited with code 0.
```

## Example No 03

### Input:

```
using System;

namespace Abdullah_Sadiq_CP_Lab_04
{
    class Program
    {
        static void Main(string[] args)
        {
            int x = 10, y = 5;
            Console.WriteLine("x>y:\t" + (x > y));
            Console.WriteLine("x<y:\t" + (x < y));
            Console.WriteLine("x>=y:\t" + (x >= y));
            Console.WriteLine("x<=y:\t" + (x <= y));
            Console.WriteLine("x==y:\t" + (x == y));
            Console.WriteLine("x!=y:\t" + (x != y));
        }
    }
}
```

### Output:

```
C:\> Microsoft Visual Studio Debug Console

x>y:    True
x<y:    False
x>=y:   True
x<=y:   False
x==y:   False
x!=y:   True

C:\Users\ESHOP\source\repos\Abdullah Sadiq CP Lab 04\Abdullah Sadiq CP Lab 04\
Lab 04.exe (process 8448) exited with code 0.
```

**Task No 01:** Which of the following values can be assigned to variables of type float, double and decimal:

5, -5.01, 34.567839023, 12.345, 8923.1234857, 3456.091124875956542151256683467

**Solution:**

1. 5 = float
2. -5.01 = float
3. 34.567839023 = double
4. 12.345 = float
5. 8923.1234857 = double
6. 3456.091124875956542151256683467 = decimal

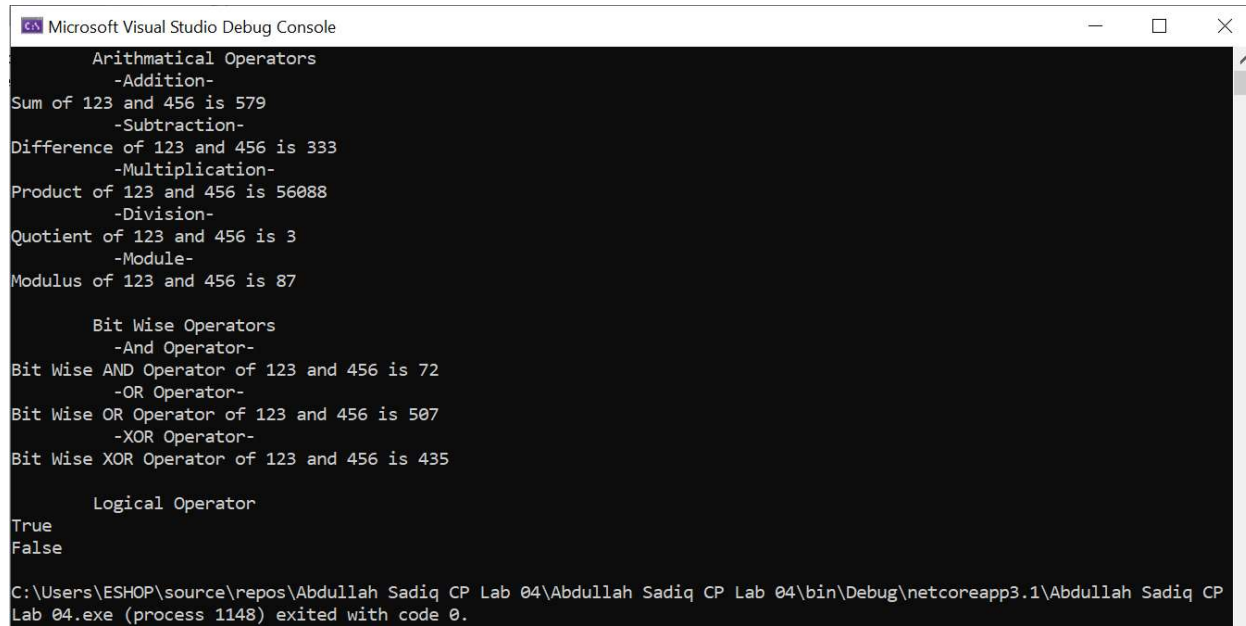
**Task No 02:** Create a simple calculator which will perform all arithmetical, Bit wise operation and logical operation on two number.

**Input:**

```
int num1 = 123, num2 = 456;
```

```
    Console.WriteLine("\tArithmatical Operators\n");
    Console.WriteLine(" -Addition-");
    Console.WriteLine("Sum of {0} and {1} is {2}", num1, num2, num1 + num2);
    Console.WriteLine("\n -Subtraction-");
    Console.WriteLine("Difference of {0} and {1} is {2}", num1, num2, num2 -
num1);
    Console.WriteLine("\n -Multiplication-");
    Console.WriteLine("Product of {0} and {1} is {2}", num1, num2, num1 * num2);
    Console.WriteLine("\n -Division-");
    Console.WriteLine("Quotient of {0} and {1} is {2}", num1, num2, num2 / num1);
    Console.WriteLine("\n -Module-");
    Console.WriteLine("Modulus of {0} and {1} is {2}", num1, num2, num2 % num1);
    Console.WriteLine("\n\n\tBit Wise Operators\n");
    Console.WriteLine(" -And Operator-");
    Console.WriteLine("Bit Wise AND Operator of {0} and {1} is {2}", num1, num2,
num1 & num2);
    Console.WriteLine("\n -OR Operator-");
    Console.WriteLine("Bit Wise OR Operator of {0} and {1} is {2}", num1, num2,
num1 | num2);
    Console.WriteLine("\n -XOR Operator-");
    Console.WriteLine("Bit Wise XOR Operator of {0} and {1} is {2}", num1, num2,
num1 ^ num2);
    Console.WriteLine("\n\n\tLogical Operator");
    bool output;
    //Or operator
    output = (num1 == num2) || (num1 > 120);
    Console.WriteLine(output);
    output = (num1 == num2) && (num1 > 120);
    Console.WriteLine(output);
```

## Output:



```
Microsoft Visual Studio Debug Console

Arithmatical Operators
-Addition-
Sum of 123 and 456 is 579
-Subtraction-
Difference of 123 and 456 is 333
-Multiplication-
Product of 123 and 456 is 56088
-Division-
Quotient of 123 and 456 is 3
-Module-
Modulus of 123 and 456 is 87

Bit Wise Operators
-And Operator-
Bit Wise AND Operator of 123 and 456 is 72
-OR Operator-
Bit Wise OR Operator of 123 and 456 is 507
-XOR Operator-
Bit Wise XOR Operator of 123 and 456 is 435

Logical Operator
True
False

C:\Users\ESHOP\source\repos\Abdullah Sadiq CP Lab 04\Abdullah Sadiq CP Lab 04\bin\Debug\netcoreapp3.1\Abdullah Sadiq CP Lab 04.exe (process 1148) exited with code 0.
```