**C# LAB Assignments:**

**Do the all programs by creating class.**

**1.** Write a program in C# Sharp to create a user define function.   
Expected Output :   
Welcome Friends!   
Have a nice day!

**2.** Write a program in C# Sharp to create a user define function with parameters.   
  
Please input a name : John   
Expected Output :   
Welcome friend John !   
Have a nice day!

**3.** Write a program in C# Sharp to create a function for the sum of two numbers.   
  
Enter a number: 15   
Enter another number: 16   
Expected Output :   
The sum of two numbers is : 31

**4.** Write a program in C# Sharp to create a function to input a string and count number of spaces are in the string.   
Please input a string : This is a test string.   
Expected Output :   
"This is a test string." contains 4 spaces

**5.** Write a program in C# Sharp to create a function to swap the values of two integer numbers.   
  
Enter a number: 5   
Enter another number: 6   
Expected Output :   
Now the 1st number is : 6 , and the 2nd number is : 5

**6.** Write a program in C# Sharp to create a function to calculate the result of raising an integer number to another.   
  
Input Base number: 3   
Input the Exponent : 2   
Expected Output :   
So, the number 3 ^ (to the power) 2 = 9

**7.** Write a program in C# Sharp to create a function to display the n number Fibonacci sequence.   
  
Input number of Fibonacci Series : 5   
Expected Output :   
The Fibonacci series of 5 numbers is :   
0 1 1 2 3

**8.** Write a program in C# Sharp to create a function to check whether a number is prime or not.   
  
Input a number: 31   
Expected Output:   
31 is a prime number

**9.** Write a program in C# Sharp to create a function to calculate the sum of the individual digits of a given number.   
  
Enter a number: 1234   
Expected Output :   
The sum of the digits of the number 1234 is : 10

**10.** Write a program in C# Sharp to create a recursive function to find the factorial of a given number.   
  
Enter a number: 5   
Expected Output : The factorial of 5! is 120 

**11.** Write a program in C# Sharp to create a recursive function to calculate the Fibonacci number of a specific term.   
  
Enter a number: 10   
Expected Output : The Fibonacci of 10 th term is 55 

12 WAP [C# Program to Demonstrate Multilevel Inheritance](http://www.sanfoundry.com/csharp-program-multilevel-inheritance/)

13 WAP [C# Program to Illustrate Single Inheritance](http://www.sanfoundry.com/csharp-program-single-inheritance/)

14 WAP [C# Program to Illustrate Hierarchical Inheritance](http://www.sanfoundry.com/csharp-program-hierarchical-inheritence/)

15 WAP [C# Program to Illustrate Multilevel Inheritance with Virtual Methods](http://www.sanfoundry.com/csharp-program-multilevel-inheritance-virtual-methoda/)

16 WAP C# Program to Illustrate Operator Overloading