**C#**

**Assignment**

**Session 1**

(Covers Introduction, creating simple classes, access specifiers, invoking methods)

1. Write a C# program which prints “Welcome to C# . Happy Learning.”
2. Accept the username and print the welcome message along with the entered user name.

Hint: make use of args[0]

1. Define a class Student with the following fields:
   1. int rollNo; String name; String course; String college;
   2. Provide getter and setter methods.
   3. Provide a PrintDetails() method which prints all the student data.
   4. Define a separate class StudentDemo and create 4 student objects with distinct values.
   5. Invoke PrintDeatils() for each object and verify the results.
2. Define a class City with the following fields:
   1. name, population, no of colleges
   2. Provide getter and setter methods
   3. Include a PrintDetails() method.
   4. Define a separate class CityDemo and create 4 city objects with distinct values.
   5. Invoke PrintDeatils() for each object and verify the results.
3. Identify a minimum of 10 entities in the Indian Railway System ( Train, Station, Staff, etc). Define classes for them with appropriate fields and methods. The data members will be private with public setters and getters. Test each of the classes inside main. Keep all of the classes in namespace railways. Use setters to add data. Do not define any constructors.
4. Similarly, identify a minimum of 10 entities in a college and define classes for each of them. The data members will be private with public setters and getters. Test each of the classes inside main. Keep all of the classes in namespace college. Use setters to add data. Do not define any constructors.
5. Define a class of your choice in a namespace with a PrintDetails() method. Create an object of this class in another namespace and invoke the PrintDetails() method.
6. Create a namespace named namespace\_common. Define a class Sum with a static method int Add(int a, int b). Create a namespace use\_namespace\_common and create a class UseSum with just the Main method in it. In the Main() call the Add method and print the output.
7. Redevelop assignment no. 3 by adding marks for 5 subjects for each student. Create 5 objects (no user input required) and print the details.
8. Define a Class Account(accNo, name, balance). Provide setters and getters as usual.

Include void withdraw( double amount) and void deposit(double amount) and void PrintDetails() methods.Create 5 account objects, carryout withdraw and deposit transactions and call PrintDetails at every stage and verify.