

INTRODUCTION TO C SHARP

C# is developed by microsoft and comes after C, C++, Java. It inherits the properties of C, C++, Java, VB. We can say C# is smart and intelligent sister of Java because it do work smartly in comprasion to Java. The basic concept of C# language are same as C, C++ to whom you have learnt in C, C++ tutorials. The advance concept of C# language are as :

Object

Object is representative of the class and is responsible for memory allocation of its data members and member functions. An object is a real world entity having attributes (data type) and behaviors (functions).

Class

Class is a data structure that contains data members (constants files, events), member function methods, properties, constructor, destructor, indexers and nested type. Basically :

1. It is a user defined data type.
2. It is a reference type.
3. Infact class is a tag or template for object.

Drawback of Class

Class does not allocate memory to its data members & member function itself. Basically memory is allocated through object of a class. Class can't explore itself means it can not access its members itself, to access members of a class we use object of that class.

Example :

```
1. // Namespace Declaration
2. using System;
3. // helper class
4. class ClassA
5. {
6.     string myString;
7.     // Constructor
8.     public ClassA(string str)
9.     {
```

```
10. myString = str;
11. }
12. // Instance Method
13. public void Show()
14. {
15.     Console.WriteLine("{0}", myString);
16. }
17. // Destructor
18. ~ClassA()
19. {
20.     // Some resource cleanup routines
21. }
22. }
23. // Program start class
24. class ClassProgram
25. {
26.     // Main begins program execution
27.     public static void Main()
28.     {
29.         // Instance of ClassA
30.         ClassA objA = new ClassA("Welcome to the world of C# language !!");
31.         // Call ClassA method
32.         objA.Show();
33.     }
34. }
```

Source : <http://www.dotnet-tricks.com/Tutorial/csharp/1X8S220212-Introduction-to-C-Sharp.html>