**Ques 5: Difference between Namespace and assemblies ?**

**Sol 5:**

**Namespaces** are collection of classes.It is also used to avoid name conflicts which means there are cases when two classes have same name but they perform different tasks.In such a case these two classes can be kept in different namespaces thus avoiding any confusion related to the usage of the class.To use a namespace in our program we have to add the namespace with the help of “using” keyword.

**Assemblies** are self describing unit of the program.It contains namespaces.It consists of a)Assembly Manifest b)Intermediate Code c)Type Metadata d)Resources:icons,images,text,strings,etc.

There are three types of assemblies:-

i.Private

To use these assemblies it is required to be copied in the program in which it has to be used.Without copying the assembly using private assembly is not possible.

ii.Public/Shared

To make any assembly public it is required to be kept in Global Assembly Cache(GAC).Whosoever wants to make their assembly public then they should add the assembly in GAC.

iii.Sattelite

This assembly is used for deployment purposes.If any application is being used in different locations of the country then this type of assembly will be displayed according to the local language of the country.

**Ques 9:What is the value data type and reference data type in c# ?**

**Sol 9:**

**Value Data Types:**

Simple Types

Enum Types

Struct Types

Nullable Types

**Reference Data Types:**

Class Types

Interface Types

Array Types

Delegate Types

Value data types are stored in stack.Whenever these type of variables are passed a copy of these variables are passed and any change in the value do not affect the original value.It cannot contain null.

Reference data types are stored in heap.When these variables are passed,a reference of the variable is passed and any change in the value affects the original value.They can contain null values.