.NET ASSIGNMENT-2(THEORY QUESTIONS):

Ques5) Difference between Namespace and assemblies ?

Ans5) Assembly will contain Namespaces, Classes, Data types it's a small unit of code for deployment. Assembly defines the name of the .dll file.It also avoids dll hell problem.

Namespace is used in order to avoid conflict of user defined classes.

Namespace:

1) it is a Collection of names wherein each name is Unique.

2) They form the logical boundary for a Group of classes.

3) Namespace must be specified in Project-Properties.

Assembly:

1) It is an Output Unit.

2) It is a unit of Deployment & a unit of versioning.

3) Assemblies contain MSIL code.

4) Assemblies are Self-Describing. [e.g. metadata,manifest]

5)An assembly is the primary building block of a .NET Framework application.

Ques9) What is the value data type and reference data type in c# ?

Ans9) ***Value Type:***

A data type is a value type if it holds a data value within its own memory space. It means variables of these data types directly contain their values.

For example, consider integer variable `int i=100;`

The following data types are all of value type:

- bool
- byte
- char
- double
- float
- Int

Reference Type:

Unlike value types, a reference type doesn't store its value directly. Instead, it stores the address where the value is being stored. In other words, a reference type contains a pointer to another memory location that holds the data.

For example, consider following string variable:

```
string s = "Hello World!!";
```

The following data types are of reference type:

- String
- All arrays, even if their elements are value types
- Class
- Delegates
