**Class & object**

#### 1.Classes in C++

#### Classes are user-defined datatypes and are a template for creating objects. Classes consist of variables and functions which are also called class members.

#### 2.Public Access Modifier in C++

#### All the variables and functions declared under public access modifier will be available for everyone. They can be accessed both inside and outside the class. Dot (.) operator is used in the program to access public data members directly.

#### 3.Private Access Modifier in C++

#### All the variables and functions declared under a private access modifier can only be used inside the class. They are not permissible to be used by any object or function outside the class.

#### 4.Nesting of Member Functions

#### If one member function is called inside the other member function of the same class it is called nesting of a member function.

#### 5.Objects Memory Allocation in C++

The way memory is allocated to variables and functions of the class is different even though they both are from the same class.

The memory is only allocated to the variables of the class when the object is created. The memory is not allocated to the variables when the class is declared. At the same time, single variables can have different values for different objects, so every object has an individual copy of all the variables of the class. But the memory is allocated to the function only once when the class is declared. So the objects don’t have individual copies of functions only one copy is shared among each object.