What is diff b/w C & C++.

=> C programming structured or procedure oriented. C++ is object oriented

=> Procedure oriented means the task is divided into function.

=> Object oriented means task is divided into objects

What is diff b/w C struct & C++ struct.

=> In C struct members can be only data.

=> In C++ struct members can be both data & its

What is diff b/w C++ class & C++ struct

=> In C++ struct the default access specifier is public

=> In C++ class the default access specifier is private.

What is diff b/w variable & object.

=> variable can oly represent data.

=> Object can represent data & its functionality.

What is class?

Logical representation of data and its functions
Class is layout or future coming object / virtual
encapsulation of data and its functionality.

What is object

Object is instance of class. Physical representation
of data & its functionality.

Features of object oriented:

1. Encapsulation
2. Polymorphism
3. Inheritance

encapsulation: The process of binding data & its functionality. We can achieve by using struct and class keyword.

polymorphism: One thing that exists in many forms

ex: water, ice, watervapour.

In C++ we have 2 types of polymorphism

1. Static
2. dynamic

We can achieve static polymorphism using function overloading. Constructor overloading, templates, operator overloading.

We can achieve dynamic using virtual functions, virtual base class, virtual destructor

Function present inside the class are called function mem or mem function.

Variables present inside the class is called data mem (or) mem data.

Inheritances:

The process of taking the properties from one class to another class is called inheritance

The class which is giving the properties is called parent class / super class / base class

The class which is taking properties is called child class / sub class / derived class.

Abstraction is not feature of OOPS, it is the concept.

Hiding the internal implementation & showing essential feature to outside world is called Abstraction.

Access specifiers:

In C++ we have 3 type of access specifiers

1. private 2. public 3. protected.

Private ⇒ If any data (or) function present under private section of the class then we can't access from outside the class.

Public ⇒ If any data (or) function are present under public section then we can access it from any where

protected: If any data (or) function are present under protected then we can access within the class or its child class.