Encapsulation:

* **what is Encapsulation in C++?**

**Encapsulation** is one of the fundamental concepts of **Object-Oriented Programming (OOP)**. It is the process of **binding data (variables)** and **functions (methods)** that operate on the data into a **single unit**, i.e., a **class**, and restricting direct access to some of the object's components.

* How is Encapsulation Achieved:

1. Private: Members are accessible **only within** the class.
2. Public: Members are accessible from **outside** the class.
3. Protected: Used in inheritance (not needed for basic encapsulation).