* function prototypes:
* **What are Function Prototypes in C++?**

**A function prototype in C++ is a declaration of a function that tells the compiler about the function’s name, return type, and parameters, before its actual definition appears in the code**

**return\_type function\_name(parameter\_list);**

* **why Used:**

1. **Allows Function Calls Before Definition: functions must be declared before they are used. If you want to call a function in main () that is defined later in the code, the compiler needs to know its details in advance in advance. This is done using a function prototype.**
2. **Enables Type Checking by Compiler:**

* The correct number of arguments is passed
* The correct data types are used

1. **Supports Modular Programming: - functions are often defined in separate files. Prototypes allow you to include only the function declarations (e.g., in header files), so the main code can use those functions without knowing their internal code.**
2. **Improves Code Readability and Structure: - Placing all function prototypes at the top of the file or in a header file gives a clear overview of what functions exist, making the code easier to read and maintain.**