

Main Function

The **main function** is the starting point of a C++ program.

When a program is executed, the computer begins running instructions from the `main()` function.

Every C++ program must contain **one and only one** `main()` function.

It returns an integer value, usually `0`, to indicate that the program has finished successfully.

The `main()` function is automatically called by the operating system.

Namespace

A **namespace** is used to group related identifiers such as variables, functions, and classes. It helps prevent name conflicts when different parts of a program or libraries use the same names.

The **std namespace** contains standard C++ library components such as input/output objects and functions.

Use of Namespace

Namespaces are used to:

- Avoid name conflicts
- Organize program code
- Improve readability and maintainability
- Allow the use of multiple libraries safely