14. IMPORTING C++ PROGRAMS IN PYTHON

Learning Objectives

After the completion of this chapter, the student will be able to

- ⊞ Understand what is wrapping.

- ⊞ Able to import C++ functions and classes in to Python programs.

- ⊞ Create environment to work with both languages.

- ⊞ Execute and debug Python programs.

Important Notes and Points

- ❖ A scripting language is a programming language designed for integrating and communicating with other programming languages.

- ❖ Python deletes unwanted objects (built-in types or class instances) automatically to free the memory space. The process by which Python periodically frees and reclaims blocks of memory that no longer are in use is called Garbage Collection.

- ❖ API-**Application Programming Interface** for interfacing with C programs

- ❖ SWIG (Simplified Wrapper Interface Generator- Both C and C++)

- ❖ g++ is a program that calls GCC (GNU C Compiler) and automatically links the required C++ library files to the object code.

❖ In the execution command, the input file doesn't require its extension. For example, it is enough to mention just the name "pali" instead of "pali.cpp".

❖ To clear the screen in command window use **cls** command.

❖ '+' in os.system() indicates that all strings are concatenated as a single string and send that as a List.

❖ You can check out the full list of Python standard modules and what they are for. These files are in the Lib directory inside the location where Python is installed.