



C++

Session #3

#3

- What is a compiler
- C++ compiler
- Ex1: Hello-world





What is a compiler?

Definition:

A compiler is computer software that transforms computer code written in one programming language (the source language) into another programming language (the target language). Compilers are a type of translator that support digital devices, primarily computers. The name compiler is primarily used for programs that translate source code from a high-level programming language to a lower level language (e.g., assembly language, object code, or machine code) to create an executable program.



C++ compiler

G++ has tons of flags that you can use to compile your program. You can find all of them with:

```
$> man g++
```



C++ compiler

All your programs will have to compile with:

- -W
- -Wall
- -Werror

```
$> g++ -W -Wall -Werror *.cpp
```



C++ compiler

As you can guess, you will have sometime have to write your code to different files.

Usually, you will have one file per class (actually cpp+hpp)



C++ compiler

- *.cpp
 - This file contains the implementation of your class. It's the actual logic
- *.hpp
 - This one will contain the class, MACROS, function declaration