Cheatsheets / Learn C++



# Hello World

## **Compile Command**

Using GNU, the compilation command is g++ followed by the file name. Here, the name of the source file is **hello.cpp**.

g++ hello.cpp

#### **Execute Command**

The execution command is \_/ followed by the file name. Here, the name of the executable file is **a.out**.

./a.out

## **Single-line Comments**

Single-line comments are created using two consecutive forward slashes. The compiler ignores any text after // on the same line.

/ This line will denote a comment in C++

#### **Multi-line Comments**

Multi-line comments are created using /\* to begin the comment, and \*/ to end the comment. The compiler ignores any text in between.

```
/*
This is all commented out.
None of it is going to run!
*/
```



### **Program Structure**

The program runs line by line, from top to bottom:

- The first line instructs the compiler to locate the file that contains a library called iostream. This library contains code that allows for input and output.
- The main() function houses all the instructions for the program.

```
#include <iostream>
int main() {
  std::cout << "1\n";
  std::cout << "2\n";
  std::cout << "3\n";
}</pre>
```

## **Basic Output**

std::cout is the "character output stream" and it is used to write to the standard output. It is followed by the symbols << and the value to be displayed.

```
std::cout << "Hello World!\n";
```

#### **New Line**

The escape sequence  $\n$  (backward slash and the letter n) generates a new line in a text string.

```
std::cout << "Hello\n";
std::cout << "Hello again\n";</pre>
```