

First C++ Program

Example 1.1:

```
#include <iostream>

int main(int argc, char* argv[])
{
    //Single Line comment.

    /*
    Multiple line comments.
    */

    std::cout << "Hello, World!" << std::endl;
    return 0;
}
```

It is tradition to discuss a HelloWorld program in the start which will print the phrase “Hello, World!” to the output screen. So let us start discussing it. This is a small program but it contains many common features of all the C++ programs.

1. This program begins with “`#include <iostream>`”:
 - a. This tells the compiler that we are going to use the functions defined in `iostream` file. Cpp language provide a number of predefined files, which contain functions that are commonly used by programmer. For example `std::cout` is defined inside `iostream` file which will be used to print “Hello, World!” to the output screen.
2. Next comes the method “`int main(int argc, char* argv[])`”:
 - a. A method is a set of statements that are executed to give desire result.
 - b. **main()** is a special method of a class this is the entry point of the application.
 - c. The **int** keyword means that this method is going to return an integer value in our case it is 0.
3. Next are the comments, which are for readability of the program and are ignored by the compiler.
 - a. A **single line comment** begins with two forward slash //
 - b. A **multiline comment** begins with `/*` and ends with `*/`.
4. “`std::cout << "Hello, World!" << std::endl;`”, is a system provided

operator(object) which will print “Hello, World! ” to the standard output and will print next line char in the end.

5. In the end there is a “return 0;” which will give return value to the caller of the main function. Return statement is a way to pass the return value to the caller of the function.