Write, Compile & Execute a C++ Program

You should have already completed the setup for your OS and the Unix Tutorial before doing this part of the labwork.

1. Now that you’ve got the compiler installed, let’s go through the steps of writing a program that simply prints “Hello, World!” to the standard output.
2. You should set up a directory to hold your C++ programs. Also, each program should be in a separate directory. Make note of where you set this up so you can navigate to it from your unix command line.
3. Open your favorite text editor and create a new file. If you don’t have a text editor installed, go to the “Text Editor Installation (optional)” section at the end of the setup instructions for your OS.
4. Type the following into your new file:

|  |
| --- |
| #include <iostream>  int main() {  std::cout << "Hello, World!" << std::endl;  return 0; } |

1. Save this source file as hello\_world.cpp in the directory you set up for labwork 1 in the directory where you are saving your C++ programs. I would suggest creating a directory “lw” to hold labworks and creating a directory “1” in it to hold the code for labwork week 1.
2. Open your unix terminal. (i.e. Ubuntu on Windows, Terminal on Mac, Terminal on Linux)
3. Navigate to the directory holding hello\_world.cpp.

|  |
| --- |
| jmichael@CSE-MOORE-NB:~$ cd /mnt/c/CSCE121/2020a/lw/1 jmichael@CSE-MOORE-NB:/mnt/c/CSCE121/2020a/lw/1$ |

Note that prompts will vary depending on the system you are using.

1. Once in that directory, verify that hello\_world.cpp exists by listing the directory’s contents (ls):

|  |
| --- |
| jmichael@CSE-MOORE-NB:/mnt/c/CSCE121/2020a/lw/1$ ls hello\_world.cpp jmichael@CSE-MOORE-NB:/mnt/c/CSCE121/2020a/lw/1$ |

1. Compile and run:
   1. Compile the code with:

|  |
| --- |
| g++ -std=c++17 -o hello\_world hello\_world.cpp |

|  |
| --- |
| jmichael@CSE-MOORE-NB:/mnt/c/CSCE121/2020a/lw/1$ g++ -std=c++17 -o hello\_world hello\_world.cpp jmichael@CSE-MOORE-NB:/mnt/c/CSCE121/2020a/lw/1$ |

* 1. Run the code by executing

|  |
| --- |
| ./hello\_world |

|  |
| --- |
| jmichael@CSE-MOORE-NB:/mnt/c/CSCE121/2020a/lw/1$ ./hello\_world Hello, World! jmichael@CSE-MOORE-NB:/mnt/c/CSCE121/2020a/lw/1$ |

# 

# Acknowledgment

Link to acknowledgement of completion is in eCampus.