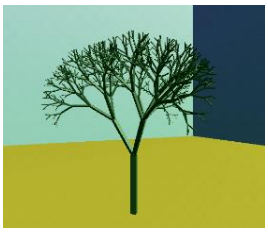


GATS Companion
Installing WSL

Author: Garth Santor
Editors: Trinh Hān
Version/Copyright: 1.0.0 (2023-09-24)

Overview

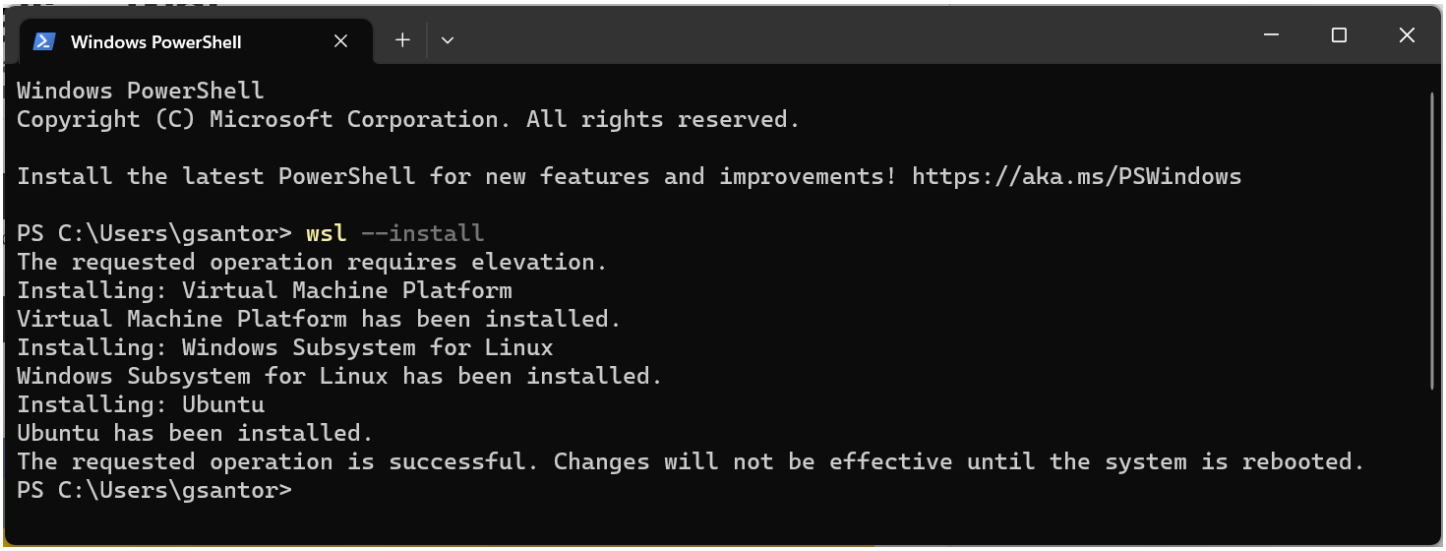
How to install Windows Subsystem for Linux (WSL) on Windows 11.

Installation

[Install WSL | Microsoft Learn]

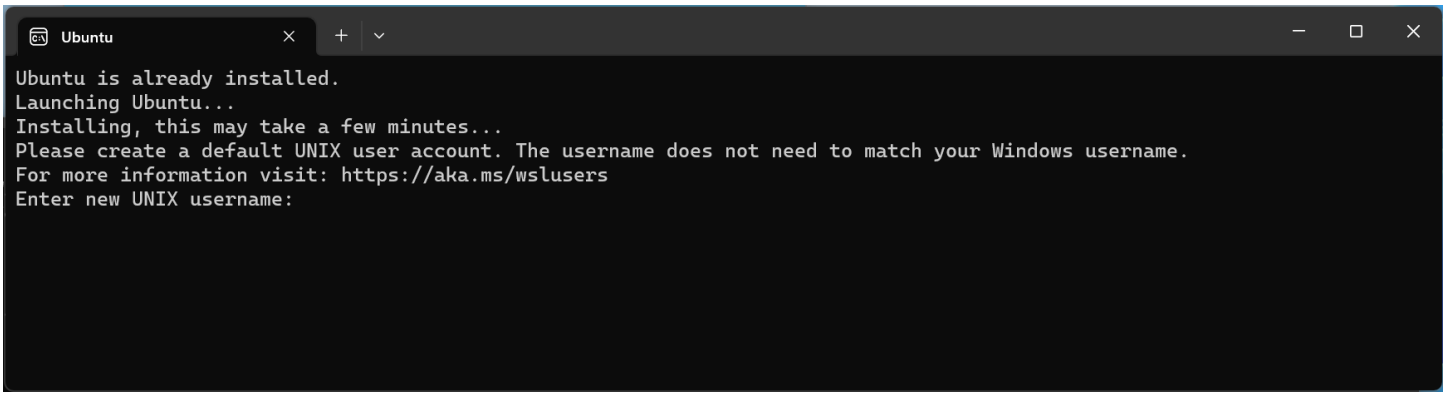
Open a PowerShell console in Windows 11, then enter the command: `wsl --install↵`

WSL will install ubuntu Linux by default.



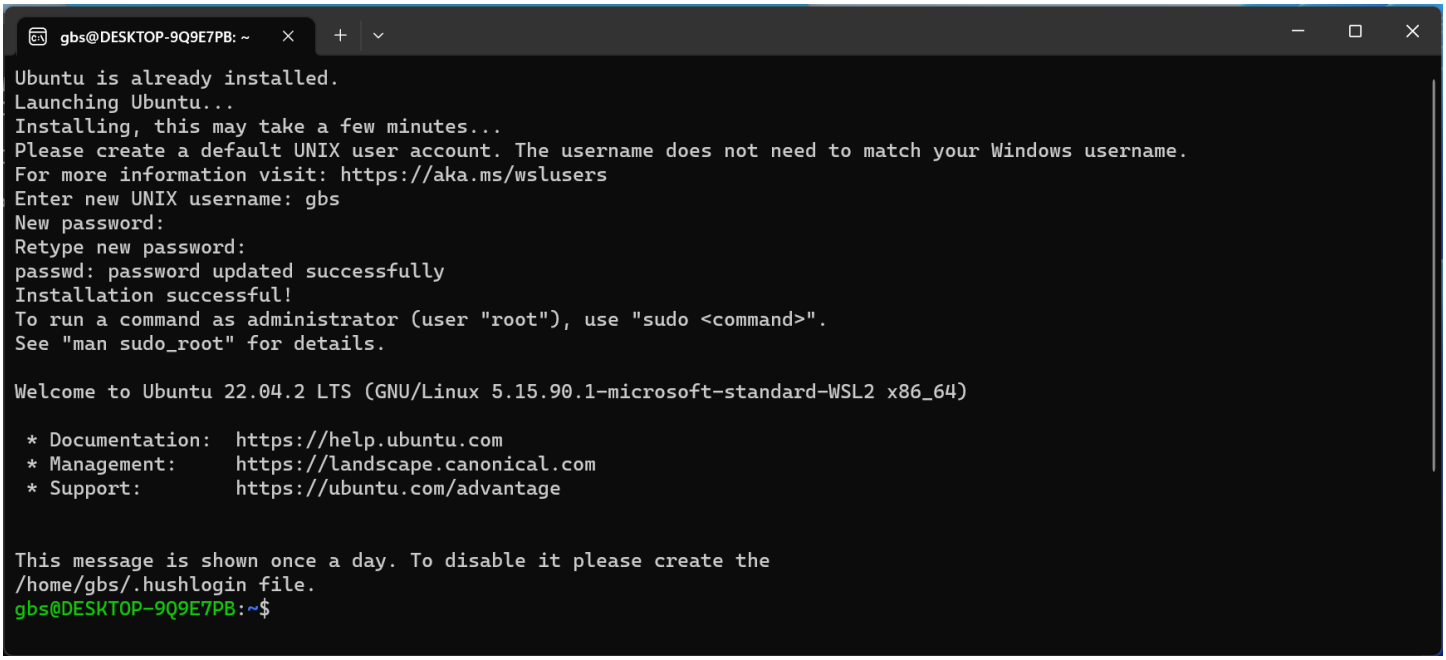
Reboot your computer.

You should see:



Adding a user account

Enter an account name and password for your new Linux account. Note that you will not see anything reflected in the console when you type the password (Linux doesn't even want to give up the number of characters in your password).



Verify the installation

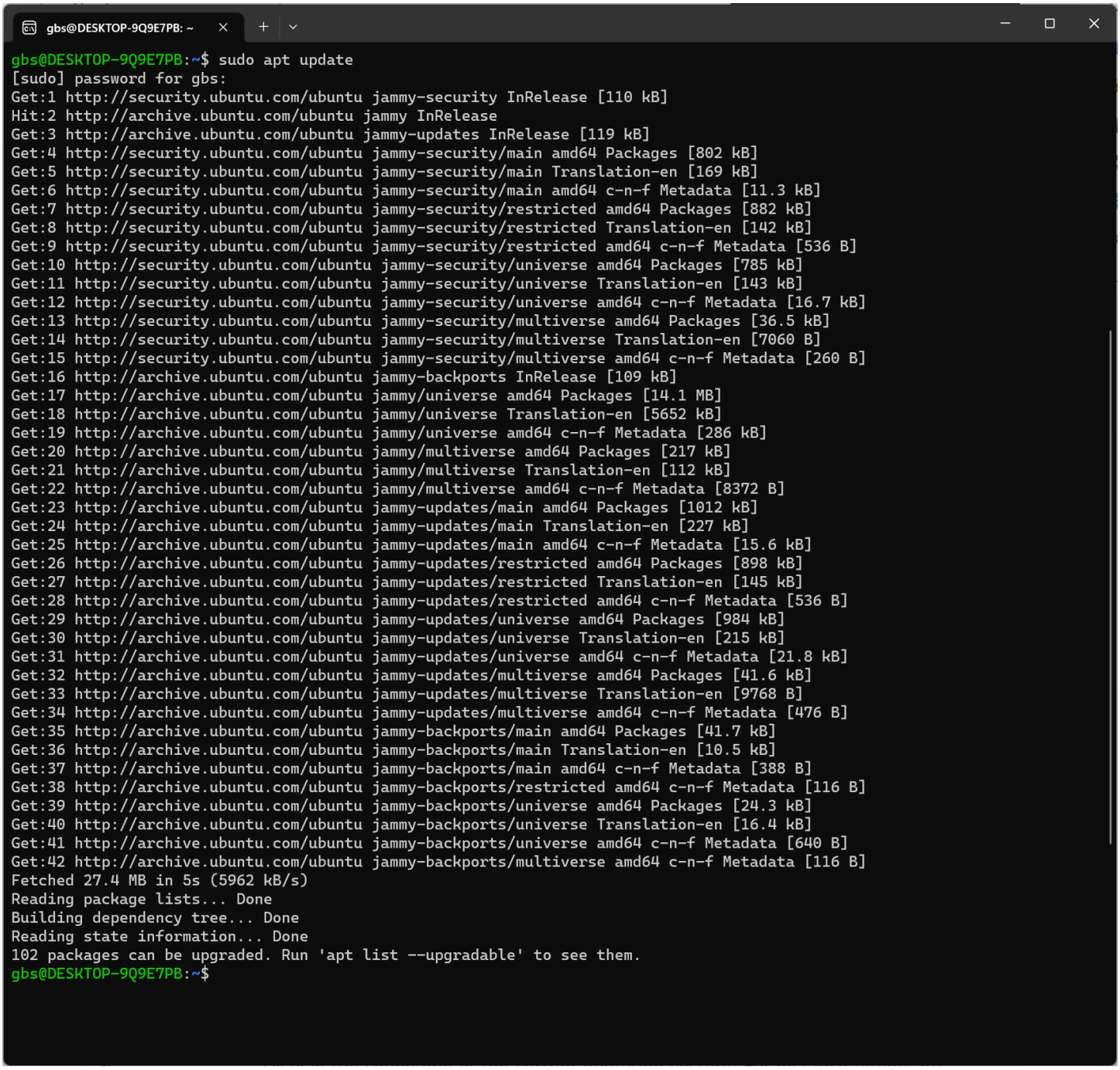
We can verify the installation using the command lsb_release. LSB stands for Linux Standard Base, a project to standardize the system structure of multiple Linux distributions, to support open standards for Linux binary applications.

At the console prompt, type: `lsb_release --all`↵

Updating your Installation

At the console prompt, type: sudo apt update↵

You will see something like this:



Leaving WSL

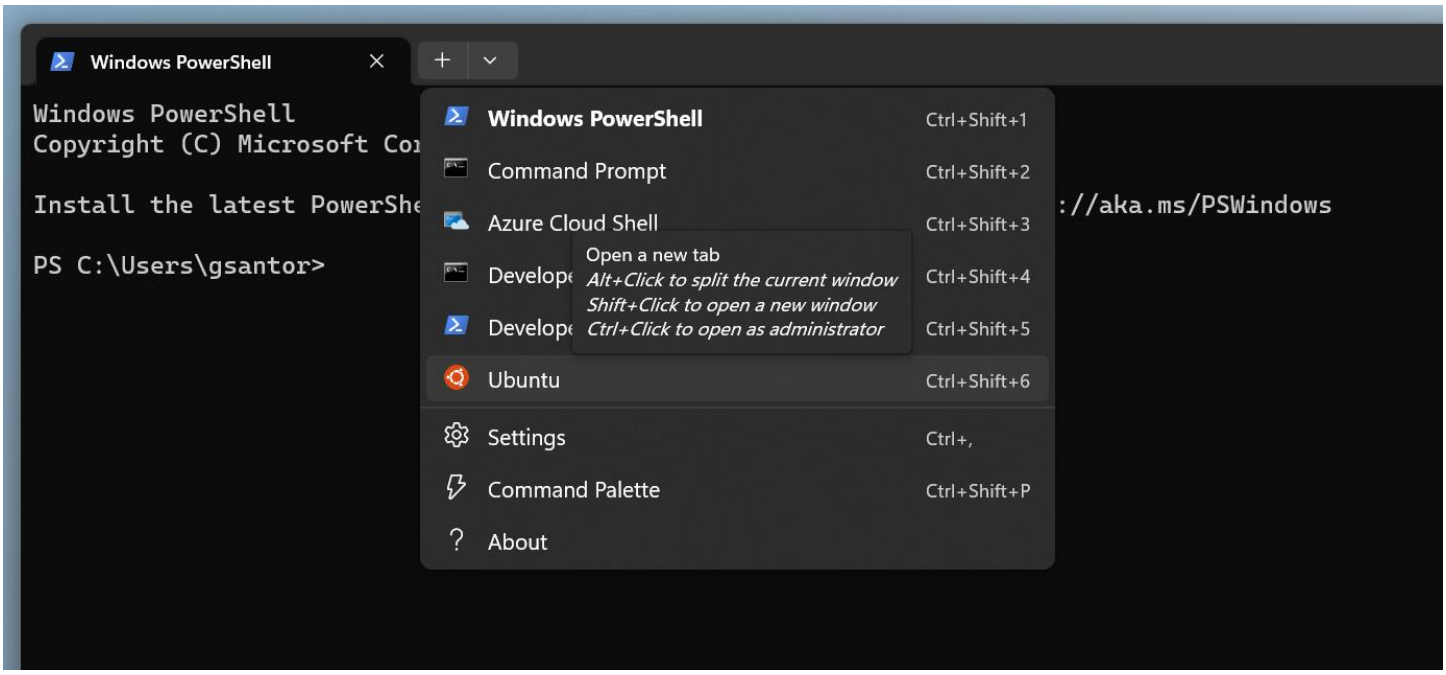
At the console prompt, type: `exit↵`

Using WSL

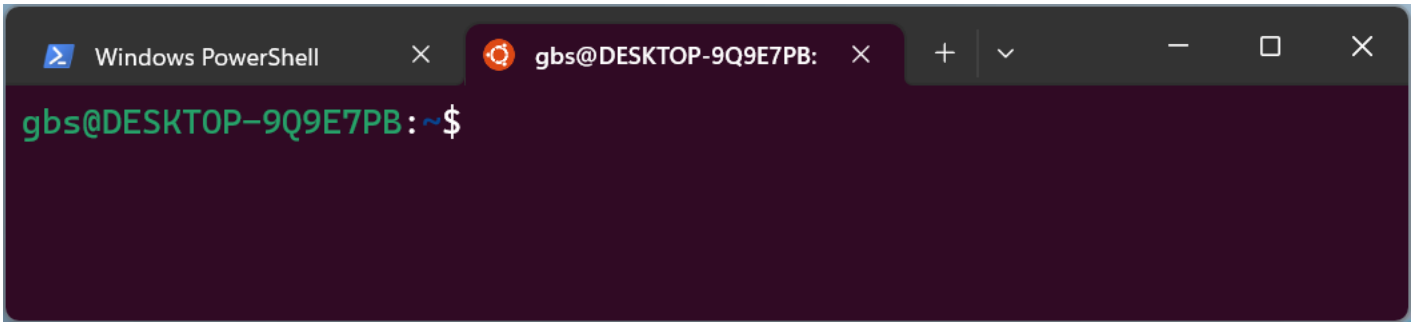
The most common way to use WSL is through windows terminal.

Launch windows terminal.

With WSL installed you'll see an option for Ubuntu on the drop menu.



Select ‘Ubuntu’ and you will be taken to your WSL account.

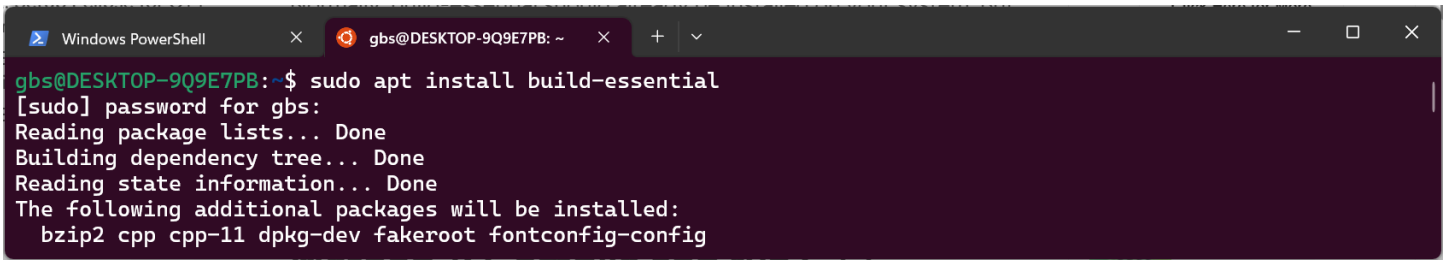


Installing development tools

The easiest way to get a development environment for Linux is to install the build-essential package.

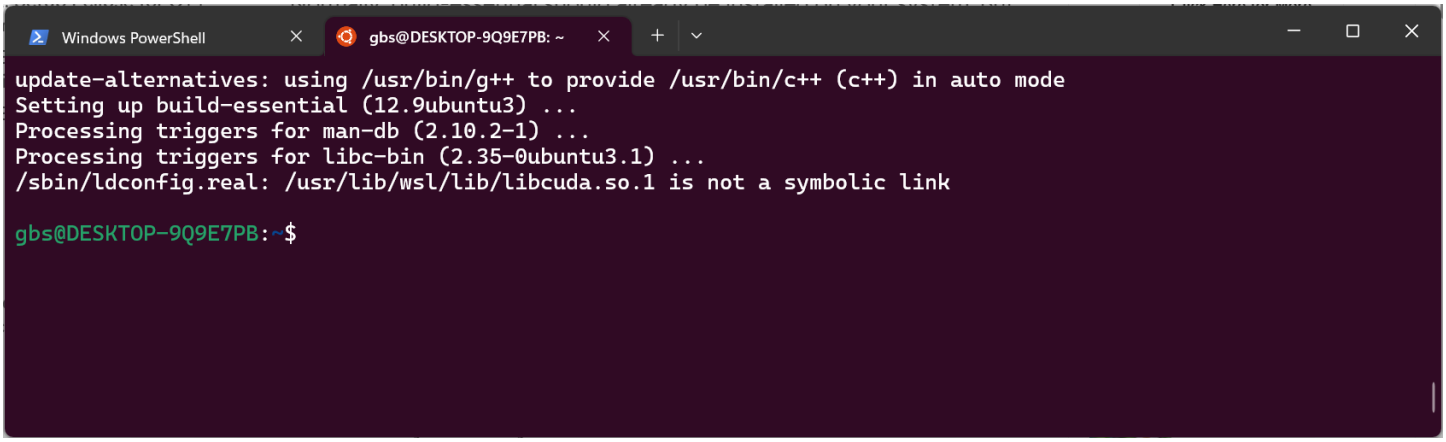
To do so, type: `sudo apt install build-essential`↵ at the Linux command prompt.

The beginning of the installation will look like this:



You’ll be prompted for addition installation files, respond with ‘Y’ to add them.

It should finish up with:



Testing a .C program

Enter the following program with your favour editor (I used `vim`).

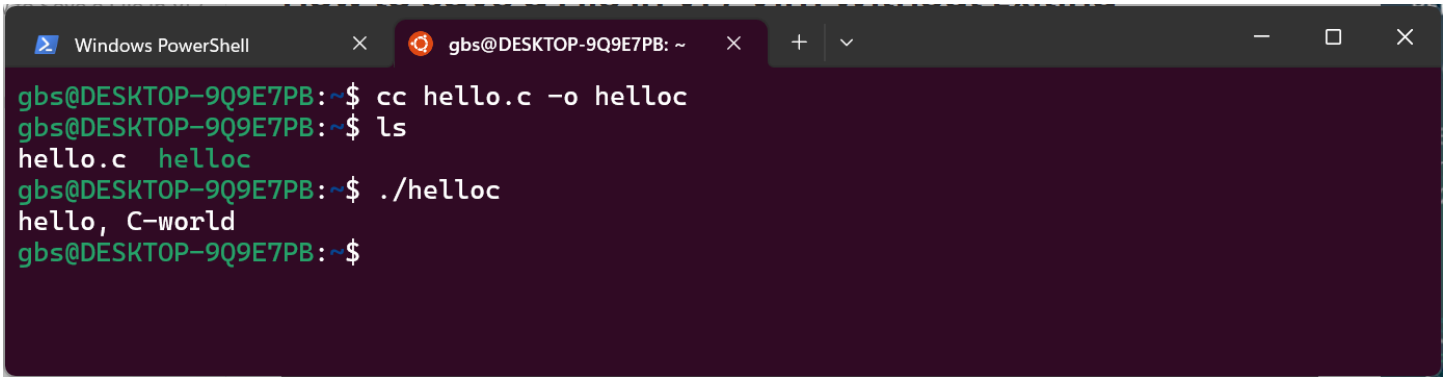
hello.c

```
#include <stdio.h>

int main() {
    printf("hello, C-world\n");
    return 0;
}
```

At the prompt, type: `cc hello.c -o helloc↵`

Execute the program by typing at the prompt: `./helloc↵`



Testing a .C++ program

Enter the following program with your favour editor (I used `vim`).

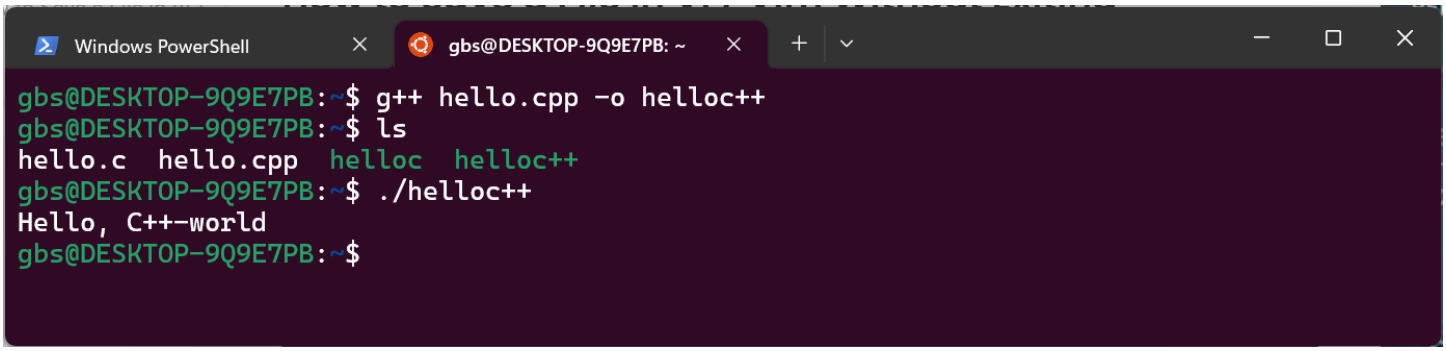
hello.cpp

```
#include <iostream>

int main() {
    std::cout << "Hello, C++-world\n";
}
```

At the prompt, type: `g++ hello.cpp -o helloc++↵`

Execute the program by typing at the prompt: `./helloc++↵`



References

Installation

[Running Visual Studio Code on Linux]

Document History

Version	Date	Activity
1.0.0	2023-09-24	Document created.