

To install ubuntu through wsl2, u need to do the following steps

1- Install wsl2, [Install WSL | Microsoft Learn](#)

wsl -- install (windows CMD)

2- Make sure that u r using wsl2 by using wsl --status



```
C:\Users\██████>wsl --status
Default Distribution: docker-desktop-data
Default Version: 2
```

If it is 1 change it to 2 by the following step

wsl --set-default-version 2 then, recheck
again by wsl --status

3- These two points needs to be enabled

- TFTP Client
- Virtual Machine Platform
- Windows Hypervisor Platform
- Windows Identity Foundation 3.5
- Windows PowerShell 2.0
- Windows Process Activation Service
- Windows Projected File System
- Windows Subsystem for Linux
- Windows TIFF IFilter

To reach this dialog

- 1- Win+R
- 2- Optionalfeatures
- 3- Then u reached it

[**restart your computer**](#)

4- Install Ubuntu from Microsoft store



5- Open ubuntu after the installation

 Ubuntu 20.04.6 LTS

Installing, this may take a few minutes...

6- Set up a username and password

 Ubuntu 20.04.6 LTS

Installing, this may take a few minutes...

Please create a default UNIX user account. The username do

For more information visit: <https://aka.ms/wslusers>

Enter new UNIX username: 

New password:

Retype new password:

7- Then u r ready to go. U have ubuntu terminal where u can do all linux commands

```
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.10.16.3-microsoft-standard-WSL2 x86_64)
```

```
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
```

```
System information as of Sat Nov 9 22:03:42 IST 2024
```

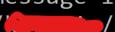
```
System load: 0.53          Processes:           8
Usage of /: 0.5% of 250.98GB   Users logged in:    0
Memory usage: 1%            IPv4 address for eth0: 172.23.226.246
Swap usage:  0%
```

```
Expanded Security Maintenance for Applications is not enabled.
```

```
0 updates can be applied immediately.
```

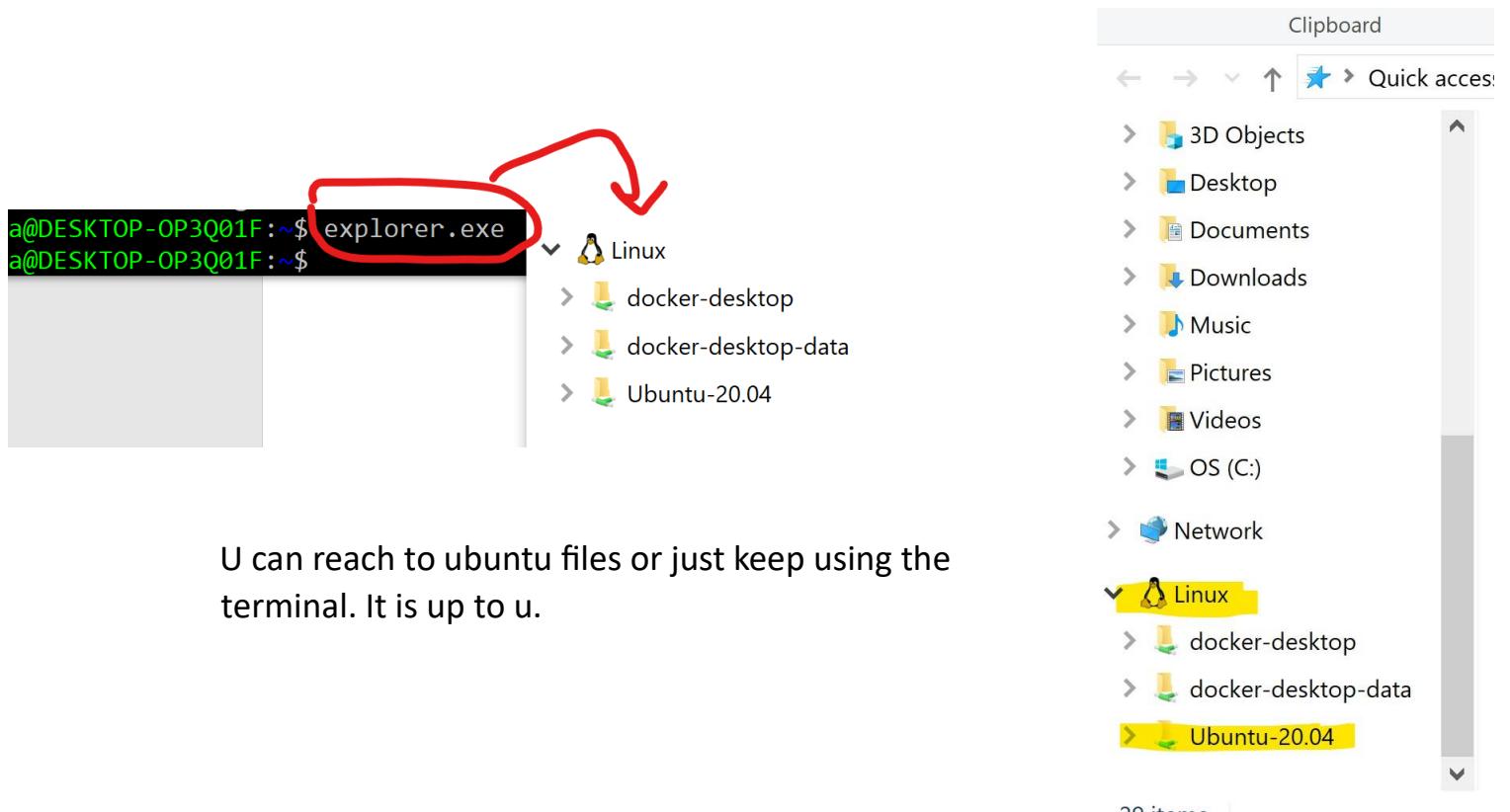
```
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
```

```
The list of available updates is more than a week old.
To check for new updates run: sudo apt update
```

```
This message is shown once a day. To disable it please create the
/home//.hushlogin file.
```

```
@DESKTOP-OP3Q01F:~$
```

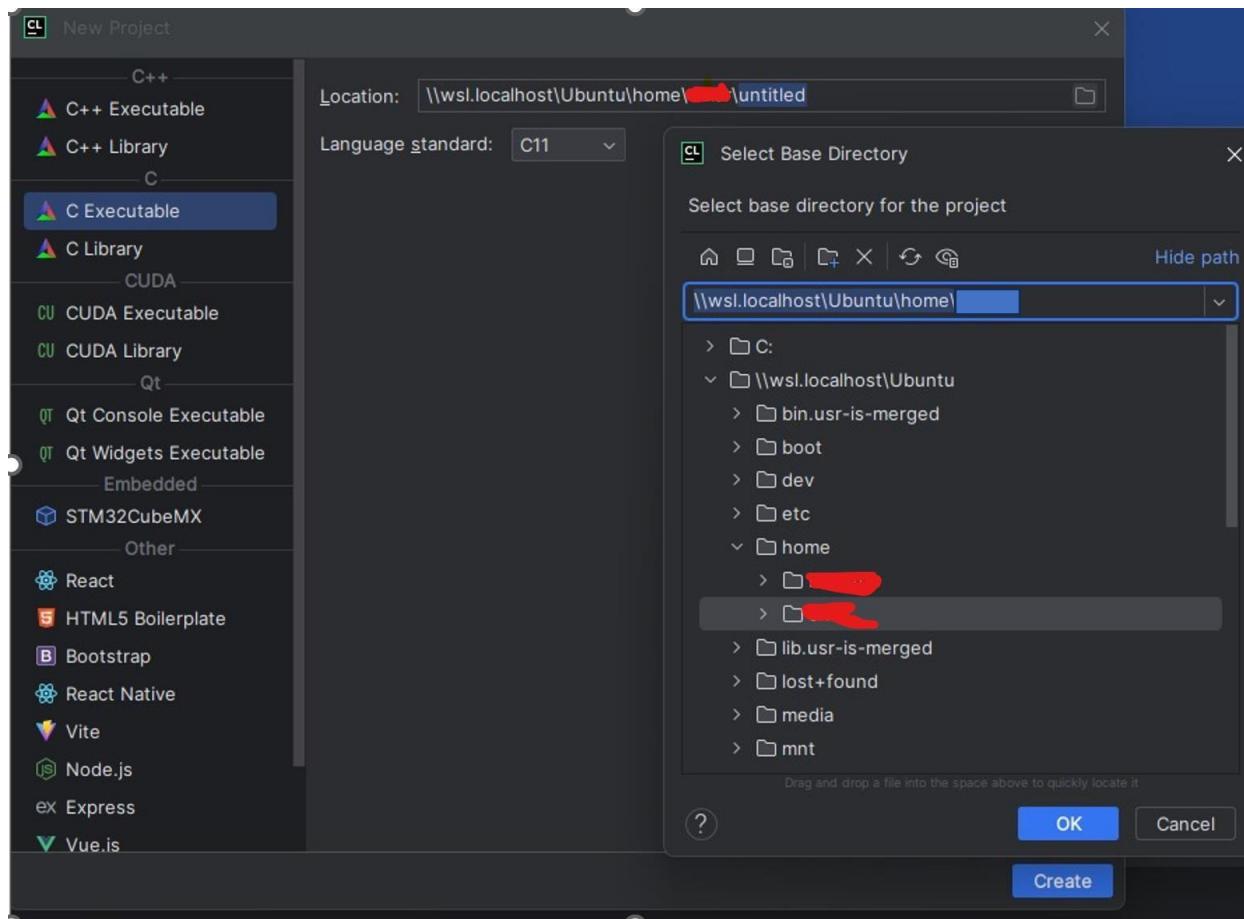
8- U can make things a little bit easier by this command



U can reach to ubuntu files or just keep using the terminal. It is up to u.

// u can create a directory call it project or whatever u like In /home/<the username that u already typed in the step 6>.

9- In Clion create a new project in this path



10- After creating the project and typing your code. Open a terminal in Clion and compile the code and run it as in the following image

Important!! u may face the issue that gcc was not found -> u need to download it by

- [sudo apt update](#)
- [sudo apt install gcc](#)

```
Terminal Local ×
[REDACTED]:~/project$ gcc main.c
[REDACTED]:~/project$ ./a.out
Hello from the parent process! PID: 33907, Child PID: 33908
Hello from the child process! PID: 33908
[REDACTED]:~/project$ gcc main.c -o run
[REDACTED]:~/project$ ./run
Hello from the parent process! PID: 33914, Child PID: 33915
Hello from the child process! PID: 33915
[REDACTED]:~/project$
```

The following command to run the project using 4 cores only

```
taskset -c 0,1,2,3 <your_program>
```

```
[REDACTED]:~/project$ taskset -c 0,1,2,3 ./a.out
Hello from the parent process! PID: 32894, Child PID: 32895
Hello from the child process! PID: 32895
[REDACTED]:~/project$
```