### WSL

1)To install the default Ubuntu 20.04 distro, enter:

wsl-install

2)To install a specific distro by name, such as Debian, enter:

```
yaswanth@3bb36d3d774953e: $ exit

logout
The operation completed successfully.
PS C:\Users\Administrator> ws1 --install -d debian
Installing: Debian GNU/Linux
Debian GNU/Linux has been installed.
Launching Debian GNU/Linux...
Please create a default UNIX user account. The username does not need to match your Windows username.
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: YASHq123
adduser: Please enter a username matching the regular expression
configured via the NAHE_REGEX configuration variable. Use the
    '---allow-bad-names' option to relax this check or reconfigure
NAHE_REGEX in configuration.
Enter new UNIX username: YASH_123
adduser: Please enter a username matching the regular expression
configured via the NAHE_REGEX configuration variable. Use the
    '---allow-bad-names' option to relax this check or reconfigure
NAHE_REGEX in configuration.
Enter new UNIX username: YASH_123
Adduser: Please enter a username matching the regular expression
configured via the NAHE_REGEX configuration variable. Use the
    '---allow-bad-names' option to relax this check or reconfigure
NAHE_REGEX in configuration.
Enter new UNIX username: yash123
New password:
Retype new password:
Retype new password:
Resymbol updated successfully
```

## 3) Update Linux

There are likely to be several Linux updates. To update Ubuntu applications, enter the following commands in the Linux terminal:

```
/ssin12392mb36d30774953e: $ sudo apt update
[sudo] password for yash123:

Get:1 http://deb.debian.org/debian bookworm InRelease [151 kB]

Get:2 http://deb.debian.org/debian bookworm bookworm-security InRelease [48.0 kB]

Get:3 http://deb.debian.org/debian bookworm-backports InRelease [55.4 kB]

Get:4 http://feb.debian.org/debian bookworm-backports InRelease [55.6 kB]

Get:5 http://security.debian.org/debian-security bookworm-security/main and64 Packages [243 kB]

Get:6 http://security.debian.org/debian-security bookworm-security/main and64 Packages [243 kB]

Get:6 http://deb.debian.org/debian-security bookworm-security/main Translation-en [144 kB]

Get:6 http://feb.debian.org/debian bookworm-backports/main Translation-en [235 kB]

Get:10 http://feb.debian.org/debian bookworm-backports/main Translation-en [235 kB]

Get:10 http://deb.debian.org/debian bookworm-backports/main Translation-en [235 kB]

Get:11 http://deb.debian.org/debian bookworm-backports/main Translation-en [6,109 kB]

Get:11 http://deb.debian.org/debian bookworm-backports/main Translation-en [16.0 kB]

Fetched 16.1 kB in 4s (3,838 kB/s)

Get:11 http://deb.debian.org/debian bookworm-backports/main Translation-en [16.0 kB]

Fetched 16.1 kB in 4s (3,838 kB/s)

Get:10 http://deb.debian.org/debian bookworm-backports/main Translation-en [16.0 kB]

Fetched 16.1 kB in 4s (3,838 kB/s)

Get:10 http://deb.debian.org/debian bookworm-backports/main Translation-en [16.0 kB]

Fetched 16.1 kB in 4s (3,838 kB/s)

Get:10 http://deb.debian.org/debian bookworm-backports/main Translation-en [16.0 kB]

Fetched 16.1 kB in 4s (3,838 kB/s)

Get:10 http://deb.debian.org/debian bookworm-backports/main Translation-en [16.0 kB]

Fetched 16.1 kB in 4s (3,838 kB/s)
```

```
Reading package lists... Done

Reading package lists... Done

Calculating upgrades... Done

Calculating upgrades... Done

The Khloking packages will be upgraded:

base-files bedutlis fdisk libblkidl libfdiskl libmountl libsmartcolsl libsystemd-shared libsystemd0 libudev1 libudidl mount systemd systemd-sysv tzdata udev util-linux util-linux-extra

18 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 9,858 kB of archives.

After this operation, 156 kB of additional disk space will be used.

Do you want to continuer [Y/n] Y

Set:l http://deb.debian.omg/debian bookworm/main amd64 base-files amd64 12.4+debl2u9 [70.8 kB]

Set:2 http://deb.debian.omg/debian bookworm/main amd64 base-files amd64 12.38.1-5-debl2u9 [10 kB]

Set:3 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [11 kB]

Set:3 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [11 kB]

Set:3 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [11 kB]

Set:5 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [12 kB]

Set:6 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [12 kB]

Set:7 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [12 kB]

Set:8 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [12 kB]

Set:10 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [18 kB]

Set:11 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [18 kB]

Set:11 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [18 kB]

Set:11 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols1 amd64 2.38.1-5-debl2u3 [18 kB]

Set:12 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols2 amd64 2.38.1-5-debl2u3 [18 kB]

Set:13 http://deb.debian.omg/debian bookworm/main amd64 bidswartcols2 amd64 2.38.1
```

5) you can also check for Linux kernal updates from Powershell using:

```
Jasont Installation process for distribution 'Debian' Failed with exit code: 127.

The Installation process for distribution 'Debian' Failed with exit code: 127.

The Installation process for distribution 'Debian' Failed with exit code: 127.

The process the Jinysailoistroy Ms. = Update

PS. C.\Users\Administrator> wal = Update

Checking for update:

The most recent version of Mindows Subsystem for Linux is already installed.

PS. C.\Users\Administrator> ______
```

### 6) Switch Between WSL1 and WSL2

```
PS C:\Users\Administrator> wsl --list --verbose
NAHE STATE VERSION

docker-desktop Stopped 2
Ubuntu Stopped 2
Debian Stopped 2
PS C:\Users\Administrator> ______

Activate Windows
```

7) (The \* asterisk highlights the default Linux installation.)

To switch Ubuntu to WSL2, enter:wsl --set-version Ubuntu 2



### 8) Set a Default Linux Distribution:

To set the default distro, list your Linux installations:



And set a default with:

### 9) Run Linux as a Specific User

To run your default distribution as a specific user, enter the following command in a Windows Powershell terminal:

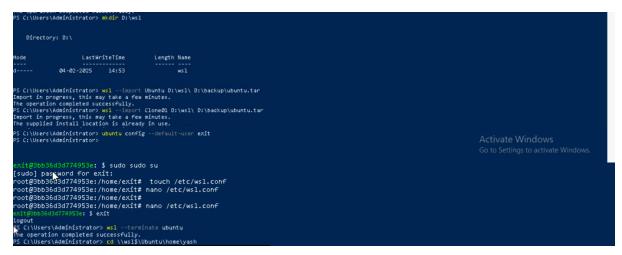


10) Move or Clone Your Linux Disk Image:

Unregister that distro to remove it from the C: drive:

11) Enter wsl –list to verify the distro has been removed.

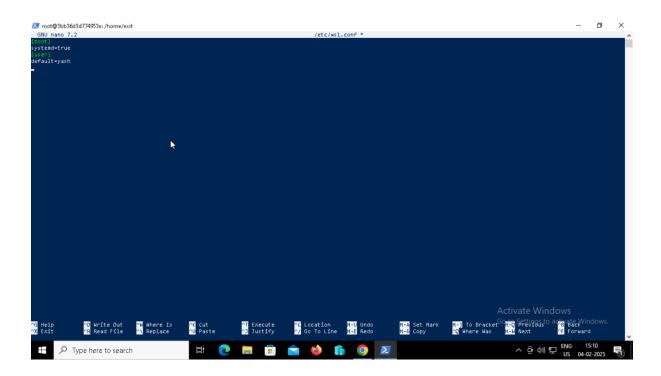
Import the backup into a new WSL2 distro at another location, such as D:\wsl



12) For other distros that aren't the WSL Windows default, define a user by logging on to the distro and creating/editing/etc/wsl.conf:

#### touch /etc/wsl.conf

#### nano /etc/wsl.conf



# 13) Accessing Windows Files from Linux

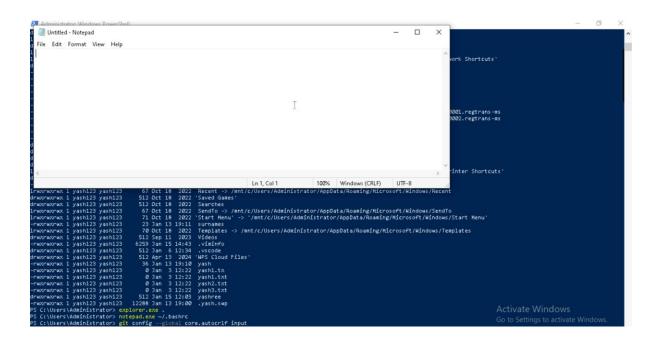
# 14) Run Windows Applications from Linux

```
PS C:\Users\Administrator> explorer.exe .

Activate Windows
PS C:\Users\Administrator> notepad.exe ~/.bashrc

Go to Settings to activate Windows
```

# 15) Install Application



```
esit@30b36d30774953e: $ sudo apt-get install build-essential
[sudo] password for exit:
Sorry, try again.
[sudo] password for exit:
Sorry, try again.
[sudo] password for exit:
Sorry, try again.
[sudo] password for exit:
[sading package lifts... Done
Building dependency tree... Done
Reading state information... Done
Reading state information... Done
The following additional packages will be installed:
bring top cop-13 cpp-13-786-64-linux-gnu cpp-x86-64-linux-gnu gcc-x86-64-linux-gnu lbalgorithm-diff-perl
Iibalgorithm-diff-xa-perl libalgorithm-erge-perl libaogs libasan8 libatomical libc-dev-bin libc-deviols libc6-dev
Iibc1-0 libryty-dev libde256-0 libdeg-perl libfe4erool librid-fortlolch-perl ligoc-130-libus libbs libry libryty-dev libde256-0 libdeg-perl librid-fire-fortlolch-perl ligoc-130-libry libgs libpsopl
Iibhe6-plugin-aondec libreif-plugin-aonenc libreif-plugin-libde265 libreif-librasan0 librid-librasan0 librid-sade librid-sade librasan0 librasan1 librasan0 librasan0
```

#### Git on Ubuntu is installed using:

```
225-02-04 10:30:23 - To install Node,js, run; apt-get install nodejs -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To install Njolid Runtime, run; apt-get install nodid -y
225-02-04 10:30:23 - To
```

```
Description of the property of
```

# 16) Installing Graphical Linux Applications

```
### State of the control of the cont
```