



National Textile University

Department of Computer Science

Subject:

Operating System

Submitted to:

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Submitted by:

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Reg number:

23-NTU-CS-1151

Lab no. :

1

Semester:

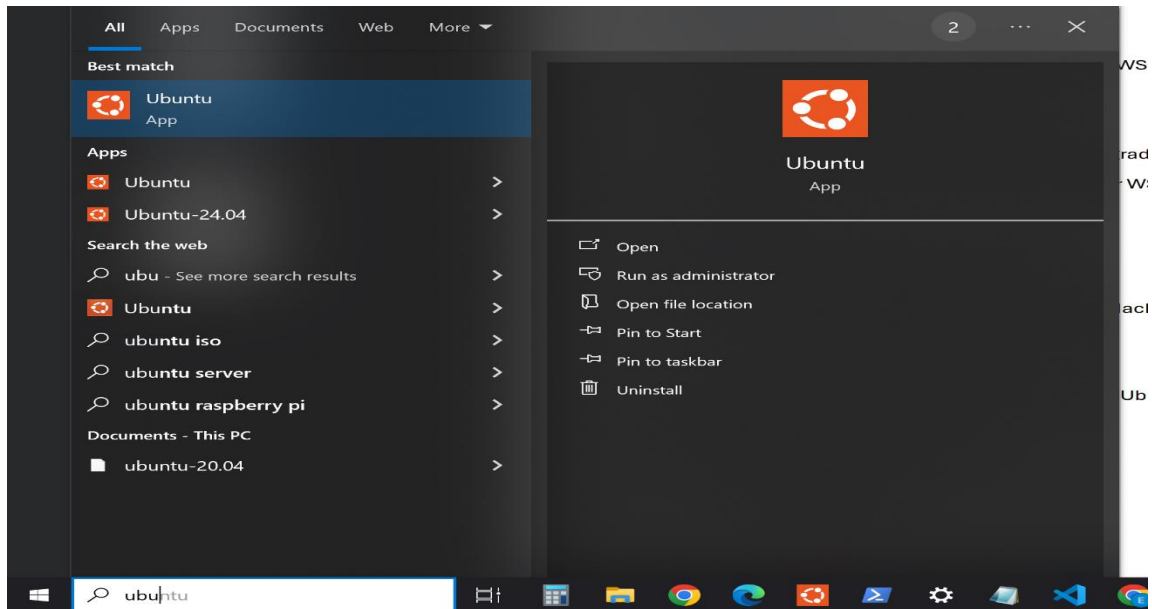
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Step 1. Open PowerShell as Administrator and run:

wsl --install

Step 2. Specify the exact release:

wsl --install -d Ubuntu-24.04



Step 3. Click Start → Power → Restart

Step 4. After the restart:

Press Start, type Ubuntu 24.04, and open it.

Step 5. When prompted:

Enter a new UNIX username

Choose a password

After you confirm the password, Ubuntu will finish setting up your new Linux home directory and bring you to a prompt that looks like:

esha@DESKTOP-XXXX:~\$

That means your Ubuntu 24.04 LTS system is ready.

Step 6. At the prompt, run:

sudo apt update && sudo apt upgrade -y

Enter your new password when it asks

```
Select esha@ESHA-DELL: ~
Provisioning the new WSL instance Ubuntu
This might take a while...
Create a default Unix user account: esha
New password:
Retype new password:
passwd: password updated successfully
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

esha@ESHA-DELL:~$ sudo apt update && sudo apt upgrade -y
[sudo] password for esha:
Get:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Get:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:5 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [1143 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [195 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.6 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [8748 B]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [880 kB]
Get:13 http://archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:14 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:16 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
```

Step 7. (Optional) Install common developer tools:

sudo apt install -y build-essential git curl wget unzip ca-certificates

Step 8. From a PowerShell window (not inside Ubuntu) you can double-check:

wsl -l -v

You should see something like:

NAME	STATE	VERSION
Ubuntu-24.04	Running	2

Now you have working Ubuntu 24.04 LTS running under WSL 2.

```
Select esha@ESHA-DELL: ~
wsl_hello.txt
esha@ESHA-DELL:~$ gcc --version
gcc (Ubuntu 13.3.0-6ubuntu2~24.04) 13.3.0
Copyright (C) 2023 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

esha@ESHA-DELL:~$ g++ --version
g++ (Ubuntu 13.3.0-6ubuntu2~24.04) 13.3.0
Copyright (C) 2023 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

esha@ESHA-DELL:~$ whereis gcc
gcc: /usr/bin/gcc /usr/lib/gcc /usr/libexec/gcc /usr/share/gcc /usr/share/man/man1/gcc.1.gz
esha@ESHA-DELL:~$ whereis g++
g++: /usr/bin/g++ /usr/share/man/man1/g++.1.gz
esha@ESHA-DELL:~$ gcc --version
gcc (Ubuntu 13.3.0-6ubuntu2~24.04) 13.3.0
Copyright (C) 2023 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

esha@ESHA-DELL:~$
```

Task 3:

```
esha@ESHA-DELL:~$ cat "/mnt/c/Users/m s/Documents/hello.txt"
esha@ESHA-DELL:~$ echo "Hello from WSL" > ~/wsl_hello.txt
esha@ESHA-DELL:~$ ls
wsl_hello.txt
esha@ESHA-DELL:~$ ls ~
wsl_hello.txt
esha@ESHA-DELL:~$ ls ~
wsl_hello.txt
```