



National Textile University

Department of Computer Science

Subject:

Operating System

Submitted to:

Sir Nasir Mehmood

Submitted by:

Gulam Rasool

Reg number:

23-NTU-CS-1159

Lab no:

1st

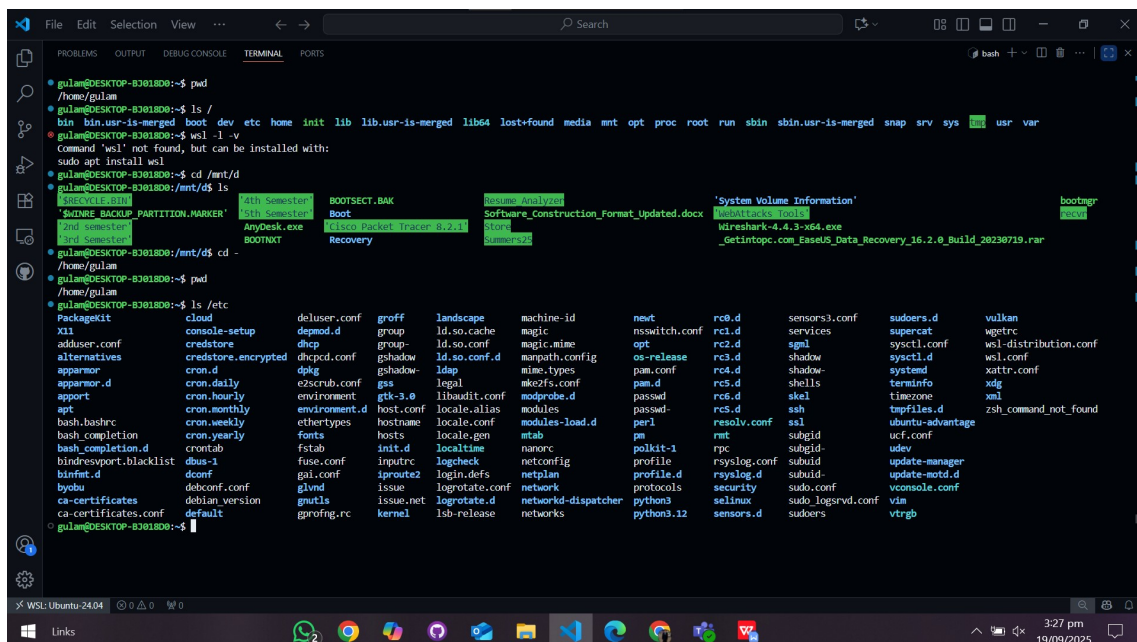
Semester:

5th

Task 1: Installation

- Install WSL using Powershell.
- Install Ubuntu24.04 using Powershell
- Add User (gulam) in Ubuntu
- Integrate Ubuntu with VS code.
- Install extension of WSL in VS code.
- Connect WSL with Ubuntu in VS code.
- Run Some Basic Commands

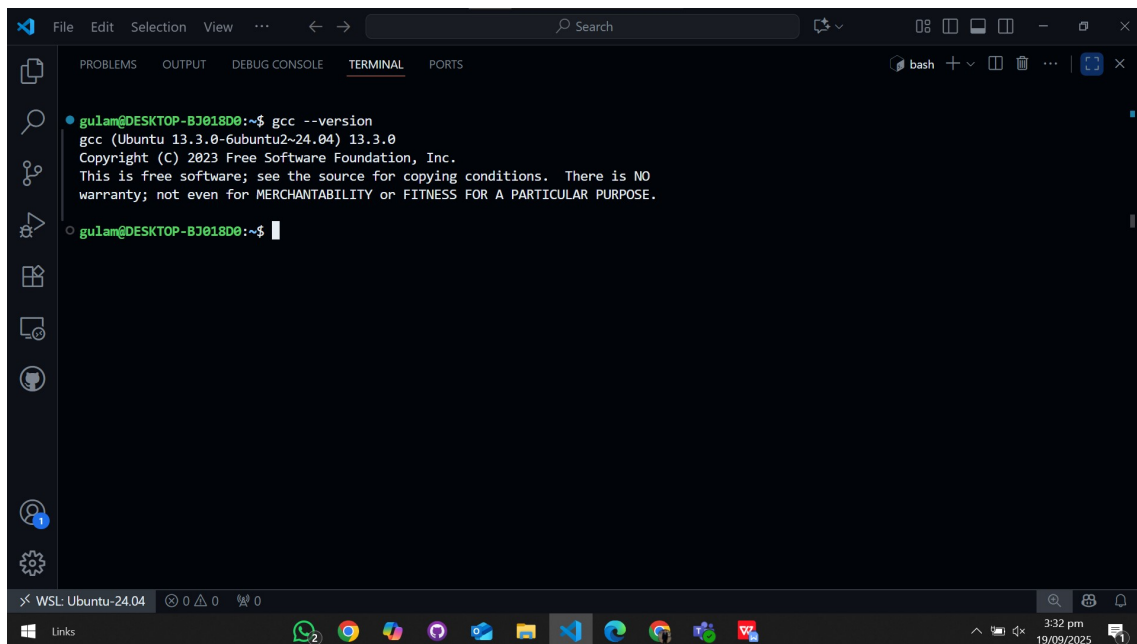
Screenshot:



Task 2: Install GCC Build Tools

- Install Build-Essentials Using the Following Commands.
 - ◆ *1. `sudo apt update && sudo apt upgrade -y`*
 - ◆ *2. `sudo apt install build-essential -y`*
- Check Gcc Version through VS Code using following Command.
 - ◆ *`gcc --version`*

Screenshot:



The screenshot shows a Visual Studio Code editor window with a terminal pane open. The terminal is running a bash shell. The user has entered the command `gcc --version`, and the output is displayed. The output shows the GCC version as 13.3.0, installed on Ubuntu 13.3.0-6ubuntu2~24.04. The terminal also displays the copyright notice for the Free Software Foundation, Inc. The VS Code interface includes a sidebar on the left with icons for Explorer, Search, Source Control, Run and Debug, and Extensions. The top of the window shows the menu bar (File, Edit, Selection, View, ...) and a search bar. The bottom status bar indicates the current workspace is 'WSL: Ubuntu-24.04' and shows system icons for network, volume, and battery.

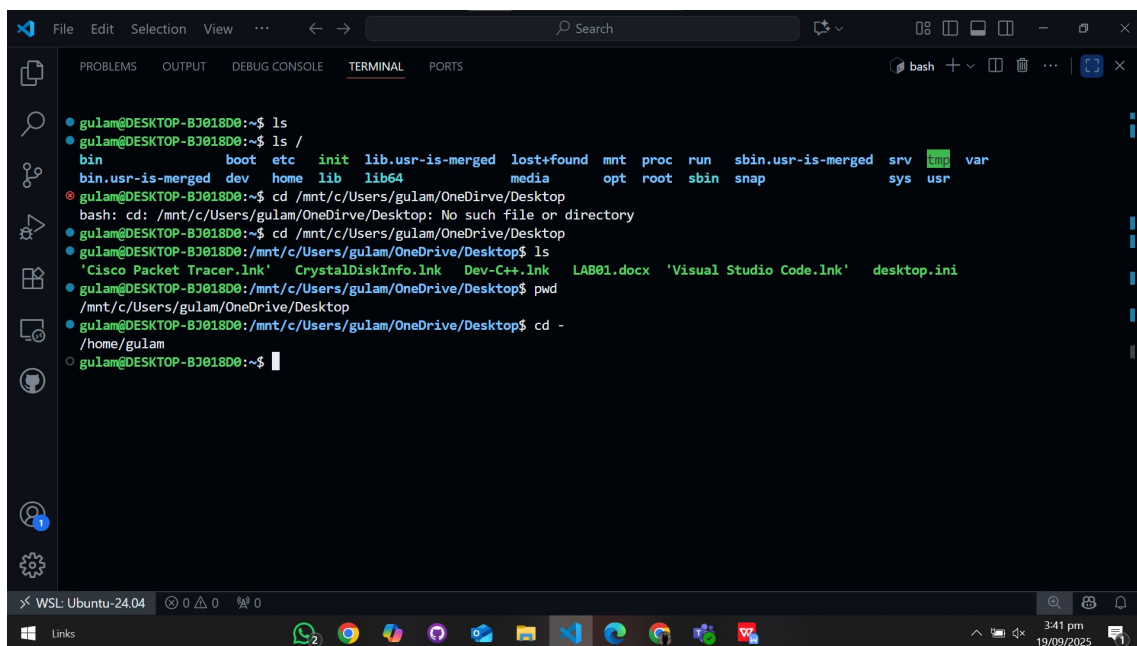
```
gulam@DESKTOP-BJ018D0:~$ gcc --version
gcc (Ubuntu 13.3.0-6ubuntu2~24.04) 13.3.0
Copyright (C) 2023 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

gulam@DESKTOP-BJ018D0:~$
```

Task 3: Run Basic Commands

- *ls* (to list all the Directories available)
- *ls /* (to show the Root Directories)
- *cd* (to change directory)
- *pwd* (for current directory)
- *cd -* (to move to previous directory)

ScreenShot:



```
gulam@DESKTOP-BJ018D0:~$ ls
gulam@DESKTOP-BJ018D0:~$ ls /
bin          boot  etc  init  lib.usr-is-merged  lost+found  mnt  proc  run  sbin.usr-is-merged  srv  tmp  var
bin.usr-is-merged  dev  home  lib  lib64  media  opt  root  sbin  snap  sys  usr

gulam@DESKTOP-BJ018D0:~$ cd /mnt/c/Users/gulam/OneDirve/Desktop
bash: cd: /mnt/c/Users/gulam/OneDirve/Desktop: No such file or directory
gulam@DESKTOP-BJ018D0:~$ cd /mnt/c/Users/gulam/OneDrive/Desktop
gulam@DESKTOP-BJ018D0:/mnt/c/Users/gulam/OneDrive/Desktop$ ls
'Cisco Packet Tracer.lnk'  CrystalDiskInfo.lnk  Dev-C++.lnk  LAB01.docx  'Visual Studio Code.lnk'  desktop.ini
gulam@DESKTOP-BJ018D0:/mnt/c/Users/gulam/OneDrive/Desktop$ pwd
/mnt/c/Users/gulam/OneDrive/Desktop
gulam@DESKTOP-BJ018D0:/mnt/c/Users/gulam/OneDrive/Desktop$ cd -
/home/gulam
gulam@DESKTOP-BJ018D0:~$
```