National Textile University, Faisalabad

Department of Computer Science
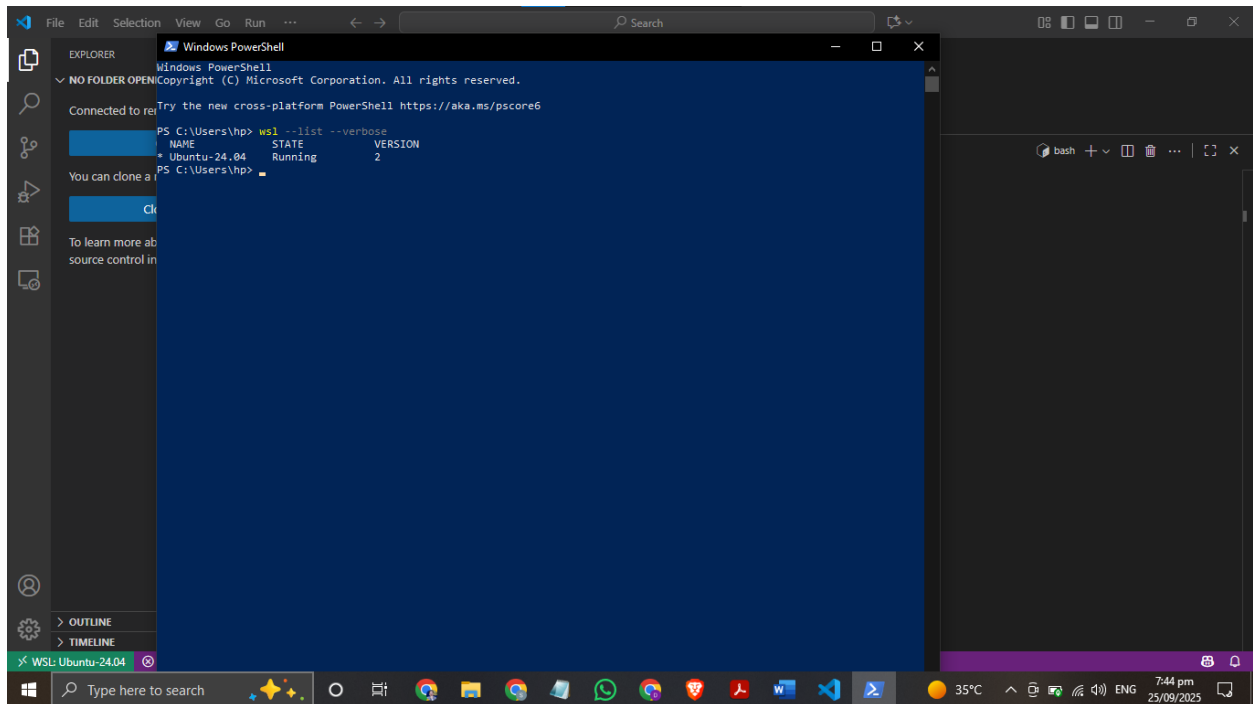
Name	Dawood Saif
Class	SE-5th (A)
Reg. No.	23-NTU-CS-1145
Course	Operating System
Submitted To	Sir Nasir Mehmood
Submission Date	25/09/2025
Lab No.	1 (Home work)

Lab No. 1 (Home work)

Task 1 Verify WSL2 and Ubuntu installation

Verify installation by running the following command in powershell:

I had already installed the wsl2 on my laptop before 1st lab so it is okay here the screenshot

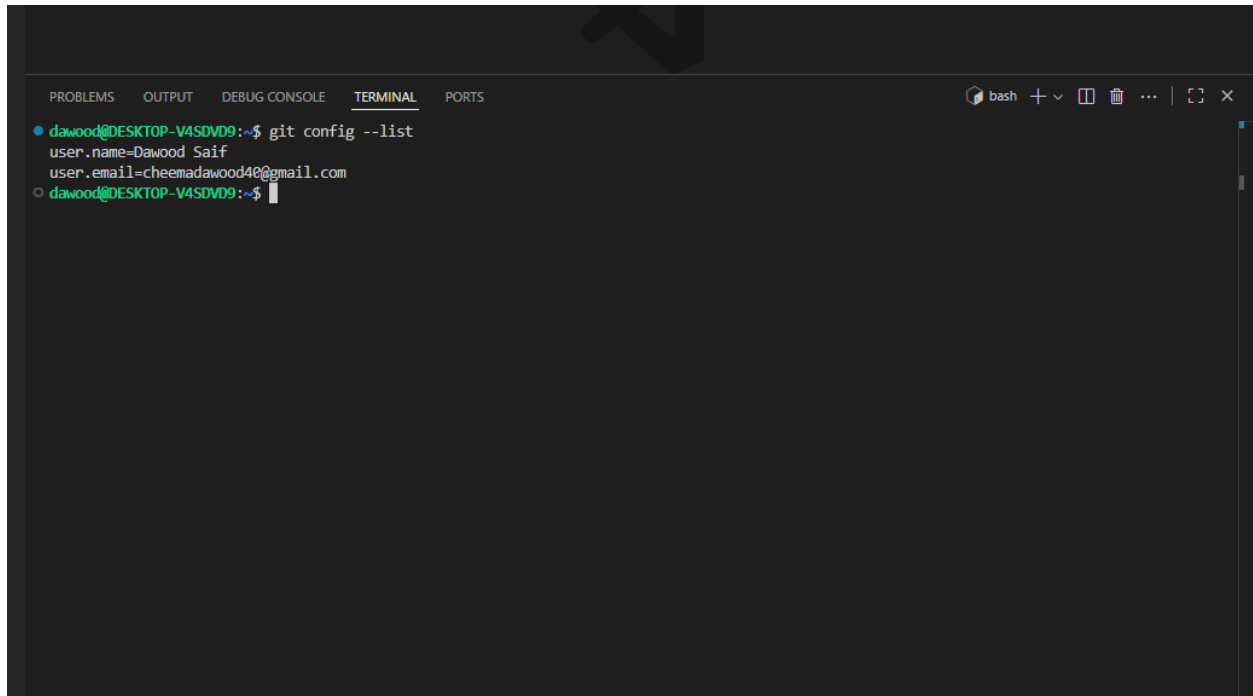## Task 2 Git & GitHub SSH Setup:

Configure Git
Set your name and email:
git config --global user.name "Your Name"
git config --global user.email "your@email.com"

- *By using the above command I set up my username and email with git hub and checked that weather it is really done*

Show your config:
git config --list

Task 3: Generate SSH Keys;

Now in this task I have to generate ssh key and paste it to git hub that will help me to clone repositories and push and pop my code

For this I have Run following command :

ssh-keygen -t ed25519

Now I Copy the public key by unsing this command that will show me my key :

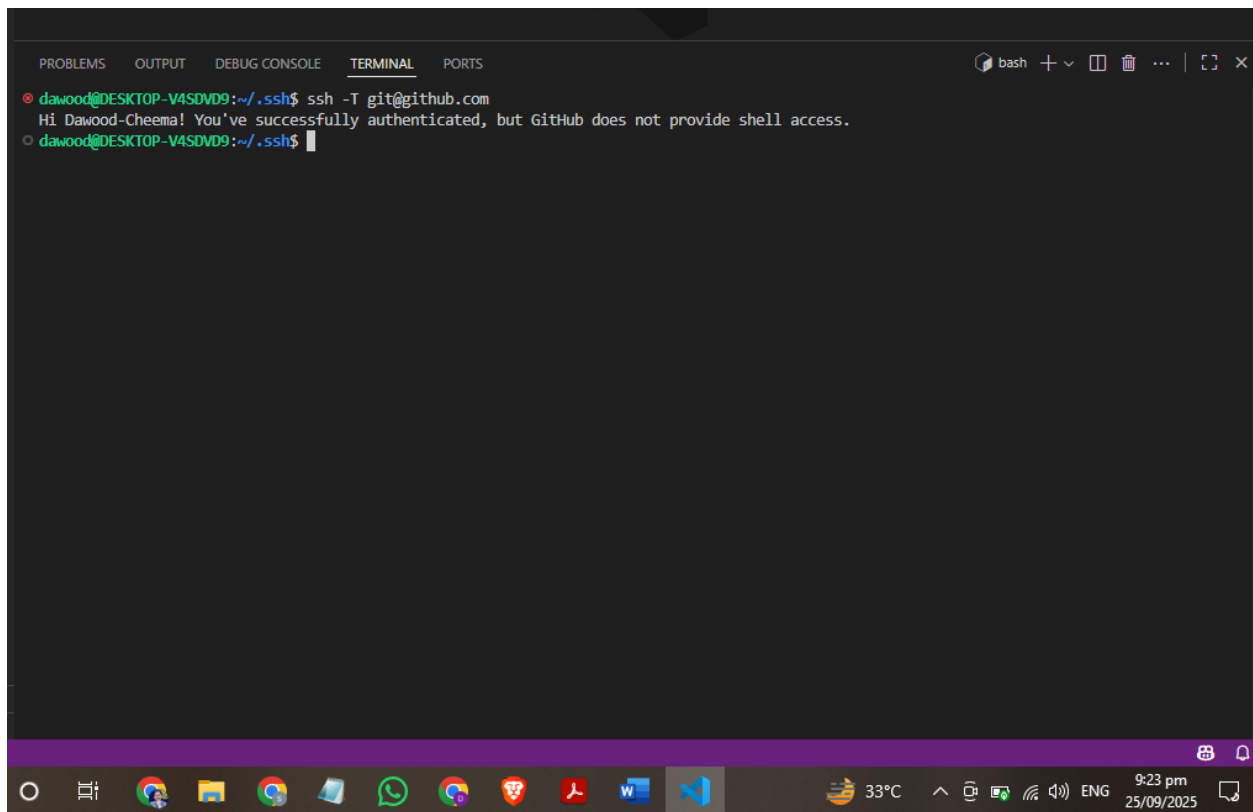cat ~/.ssh/id_ed25519.pub

Added this key to my GitHub account under Settings → SSH and GPG keys.

Task 4: Test Connection

In this now we have to see wearher the link has been established or not here is its screenshot

ssh -T git@github.com

Task 5: Install Build Tools

Before writing C programs, install the `build-essential` package which contains `gcc` , `g++` ,
and other tools required for compiling.
Run:

    sudo apt install build-essential

Verify installation by checking the version of `gcc` :

    gcc –version

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

● dawood@DESKTOP-V4SDVD9:~/Lab01-hometask$ 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.

○ dawood@DESKTOP-V4SDVD9:~/Lab01-hometask$ █
```

Task 6: How to run a c program :

First write a C program in a file with .c extension.

- Here how I created .c file
  firstly I cloned my repository from github by using its command
- then I make the folder on my github using some command and then
  created .c file
  and run the code

  gcc lab1-task1.c -o lab1-task1.out

- and then to show output I run:

  ./lab1-task1.out

Here is the screenshot of the code:

```c
#include <stdio.h>

int main() {
    printf("Hello Yarr, finally created it Dawood\n");


    return 0;
}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS   bash - Lab01-hometask +

dawood@DESKTOP-V4SDVD9:~/Lab01-hometask$ gcc lab1-task1.c -o lab1-task1.out
dawood@DESKTOP-V4SDVD9:~/Lab01-hometask$ ./lab1-task1.out
Hello Yarr, finally created it Dawood
dawood@DESKTOP-V4SDVD9:~/Lab01-hometask$