

National Textile University

Department of Computer Science

Name

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Semester:

5th

Lab:

01-Home Task

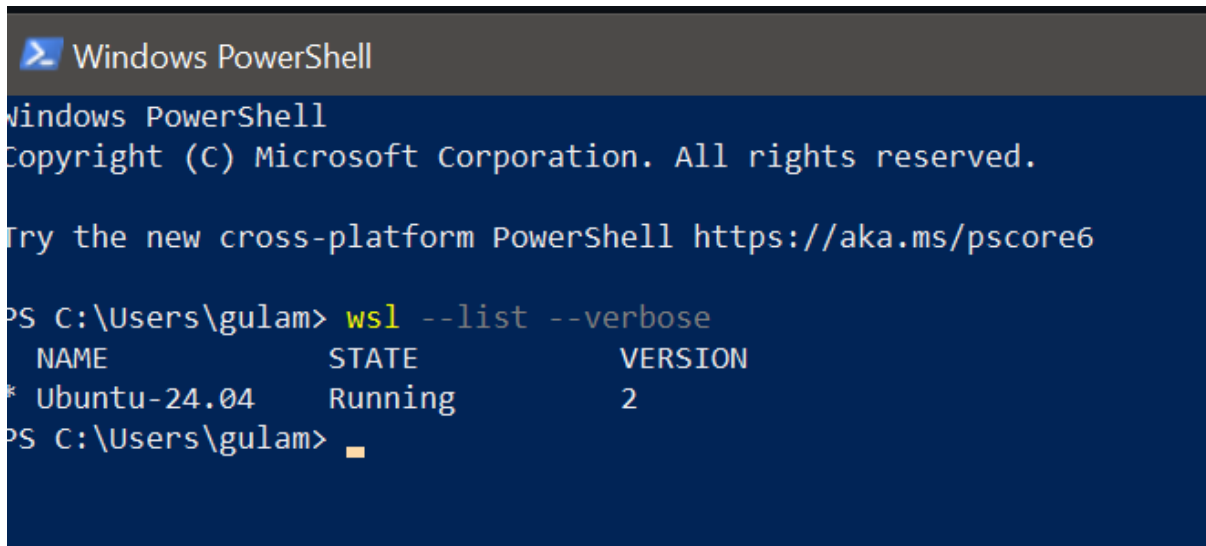
Submitted to:

Sir Nasir Mehmood

LAB 01 – HOME TASK

Github: <https://github.com/GulamRasool26/Operating-System-1159>

Part 1: WSL & Ubuntu tool Setup:



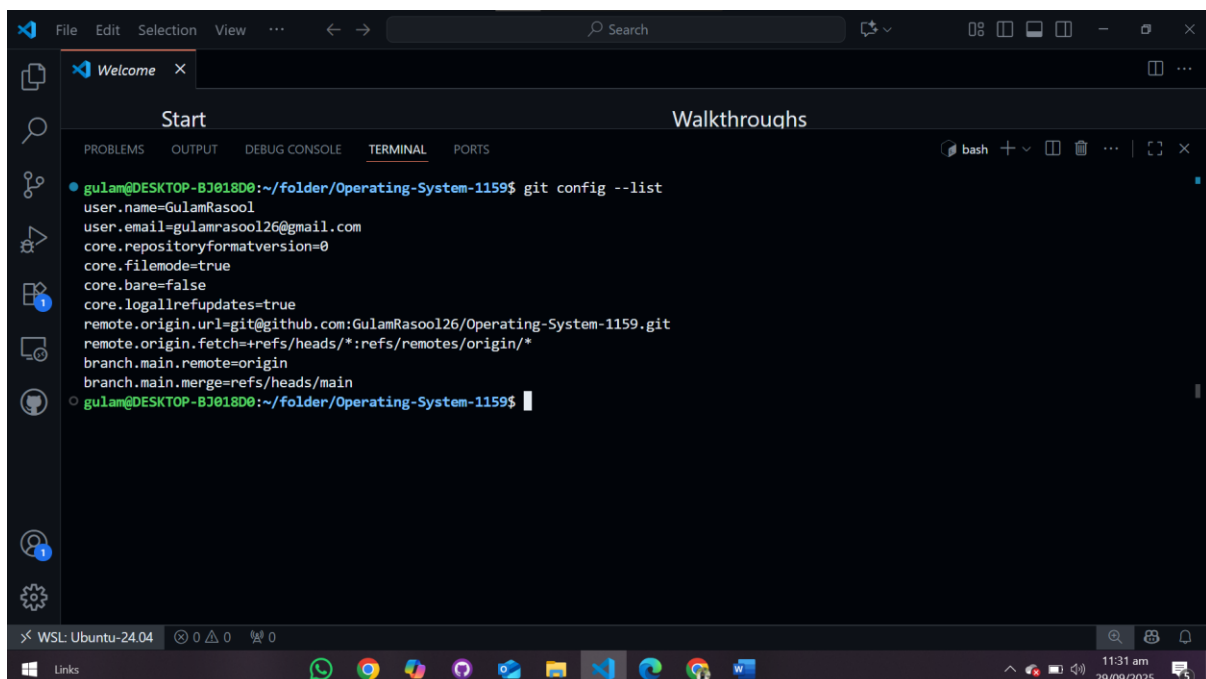
A screenshot of a Windows PowerShell terminal window. The title bar says "Windows PowerShell". The text inside the terminal shows the standard PowerShell welcome message: "Windows PowerShell", "Copyright (C) Microsoft Corporation. All rights reserved.", and "Try the new cross-platform PowerShell https://aka.ms/pscore6". Below this, the user runs the command `PS C:\Users\gulam> wsl --list --verbose`. The output is a table with three columns: NAME, STATE, and VERSION. It lists "Ubuntu-24.04" with a state of "Running" and version "2". The prompt returns to `PS C:\Users\gulam>`.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\gulam> wsl --list --verbose
  NAME            STATE          VERSION
  *-----
  Ubuntu-24.04    Running        2
PS C:\Users\gulam>
```

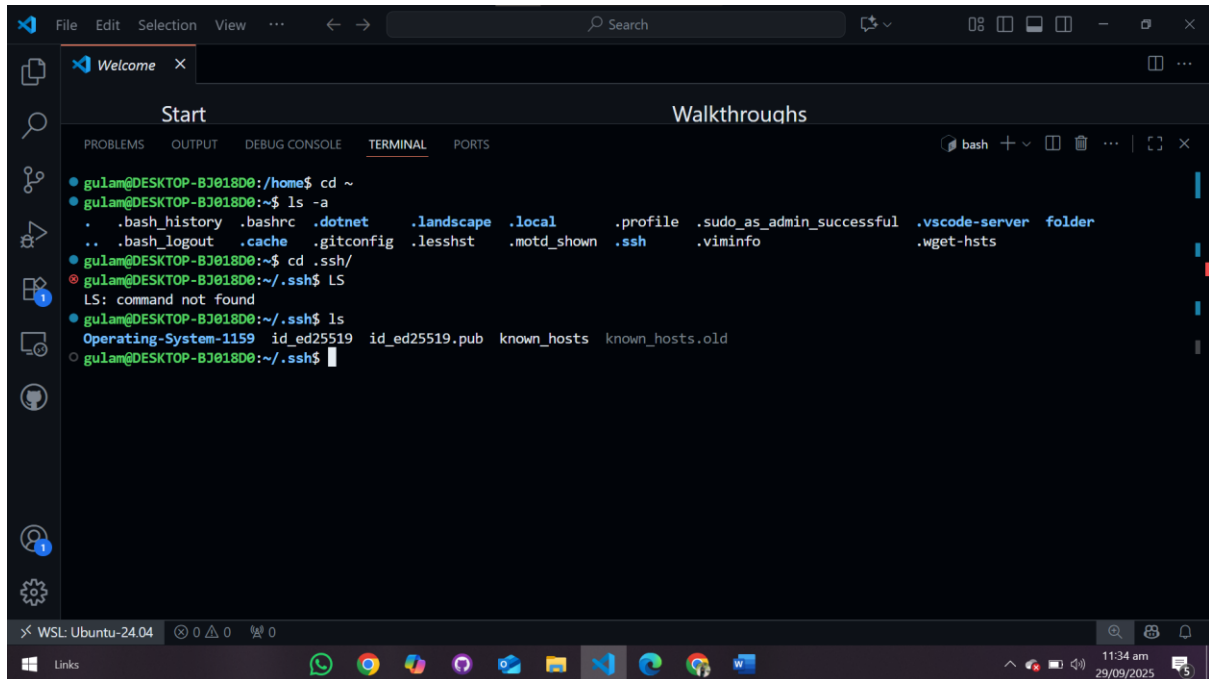
Part 2: Git & GitHub Setup:



A screenshot of the Visual Studio Code editor interface. The "Terminal" panel is open, showing a bash shell session. The user runs the command `git config --list`. The output lists various Git configuration settings, including user.name, user.email, core.repositoryformatversion, core.filemode, core.bare, core.logallrefupdates, remote.origin.url, remote.origin.fetch, branch.main.remote, and branch.main.merge. The terminal prompt is `gulam@DESKTOP-BJ018D0:~/folder/Operating-System-1159$`.

```
gulam@DESKTOP-BJ018D0:~/folder/Operating-System-1159$ git config --list
user.name=GulamRasool
user.email=gulamrasool26@gmail.com
core.repositoryformatversion=0
core.filemode=true
core.bare=false
core.logallrefupdates=true
remote.origin.url=git@github.com:GulamRasool26/Operating-System-1159.git
remote.origin.fetch=+refs/heads/*:refs/remotes/origin/*
branch.main.remote=origin
branch.main.merge=refs/heads/main
gulam@DESKTOP-BJ018D0:~/folder/Operating-System-1159$
```


SSH KEY:

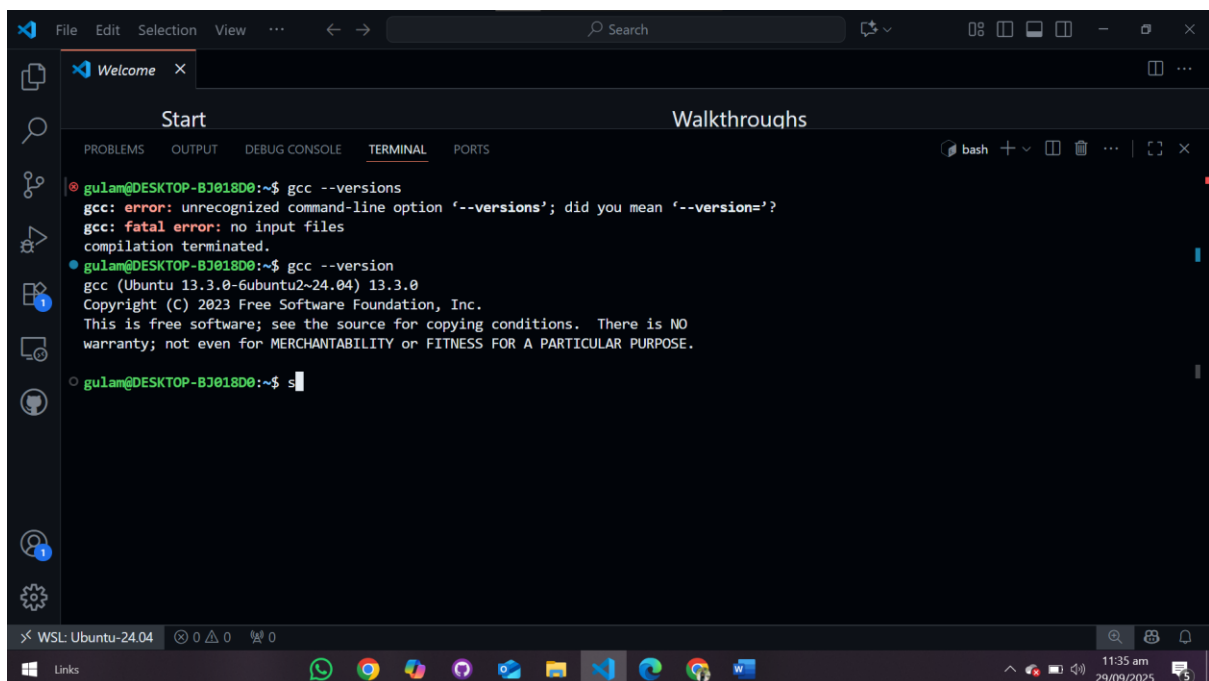


A screenshot of the Visual Studio Code interface with a terminal window open. The terminal shows the following commands and output:

```
gulam@DESKTOP-BJ018D0:/home$ cd ~
gulam@DESKTOP-BJ018D0:~$ ls -a
. .bash_history .bashrc .dotnet .landscape .local .profile .sudo_as_admin_successful .vscode-server folder
.. .bash_logout .cache .gitconfig .lessht .motd_shown .ssh .viminfo .wget-hsts
gulam@DESKTOP-BJ018D0:~$ cd .ssh/
gulam@DESKTOP-BJ018D0:~/.ssh$ LS
LS: command not found
gulam@DESKTOP-BJ018D0:~/.ssh$ ls
Operating-System-1159 id_ed25519 id_ed25519.pub known_hosts known_hosts.old
gulam@DESKTOP-BJ018D0:~/.ssh$
```

The terminal is running in a WSL (Windows Subsystem for Linux) environment, Ubuntu 24.04. The status bar at the bottom shows the time as 11:34 am on 29/09/2025.

Part 3: GCC BUILD TOOLS.

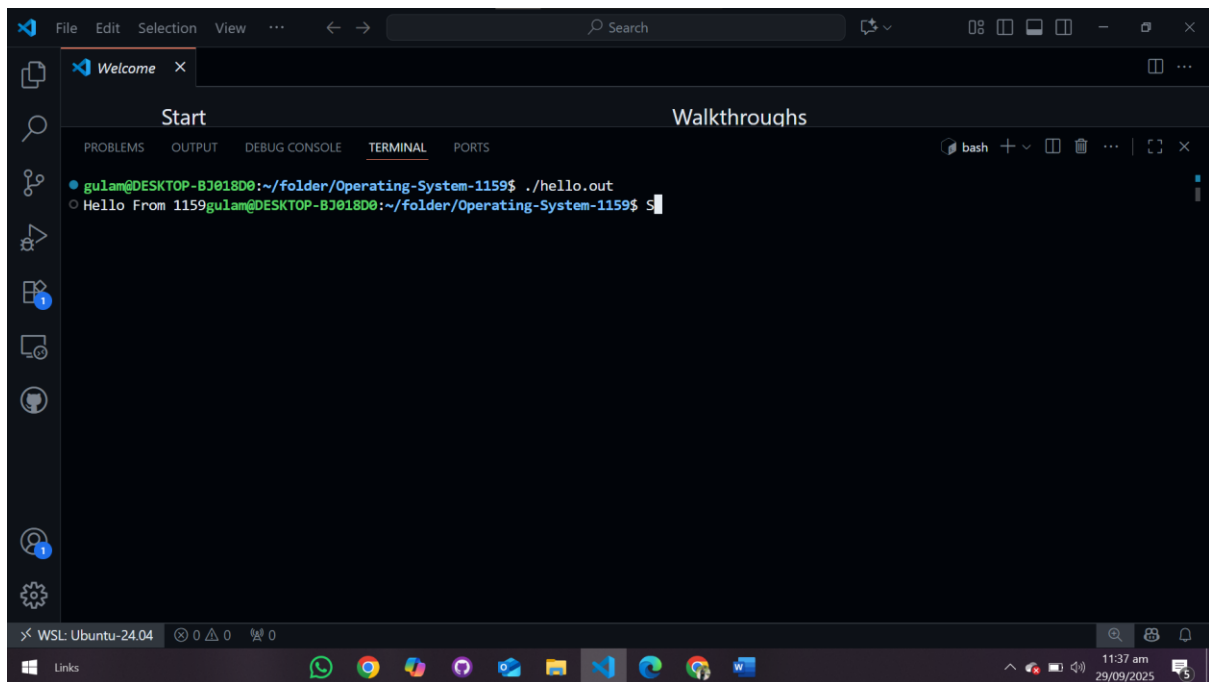


A screenshot of the Visual Studio Code interface with a terminal window open. The terminal shows the following commands and output:

```
gulam@DESKTOP-BJ018D0:~$ gcc --versions
gcc: error: unrecognized command-line option '--versions'; did you mean '--version=?'
gcc: fatal error: no input files
compilation terminated.
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:~$
```

The terminal is running in a WSL (Windows Subsystem for Linux) environment, Ubuntu 24.04. The status bar at the bottom shows the time as 11:35 am on 29/09/2025.

How to run a C program:



The image shows a screenshot of the Visual Studio Code (VS Code) interface. The main window displays the 'Start' page with tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL', and 'PORTS'. The 'TERMINAL' tab is active, showing a bash shell session. The prompt is 'gulam@DESKTOP-BJ018D0:~/folder/Operating-System-1159\$'. The user has entered the command './hello.out', and the output is 'Hello From 1159gulam@DESKTOP-BJ018D0:~/folder/Operating-System-1159\$'. The status bar at the bottom indicates 'WSL: Ubuntu-24.04' and shows the system time as 11:37 am on 29/09/2025.

```
File Edit Selection View ... Search
Welcome x
Start Walkthroughs
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
gulam@DESKTOP-BJ018D0:~/folder/Operating-System-1159$ ./hello.out
Hello From 1159gulam@DESKTOP-BJ018D0:~/folder/Operating-System-1159$ S
WSL: Ubuntu-24.04 0 0 0 0
Links 11:37 am 29/09/2025
```