National Textile University

Department of Computer Science

Subject:

Operating Systems

Submitted To:

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Registration No:

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Lab No:

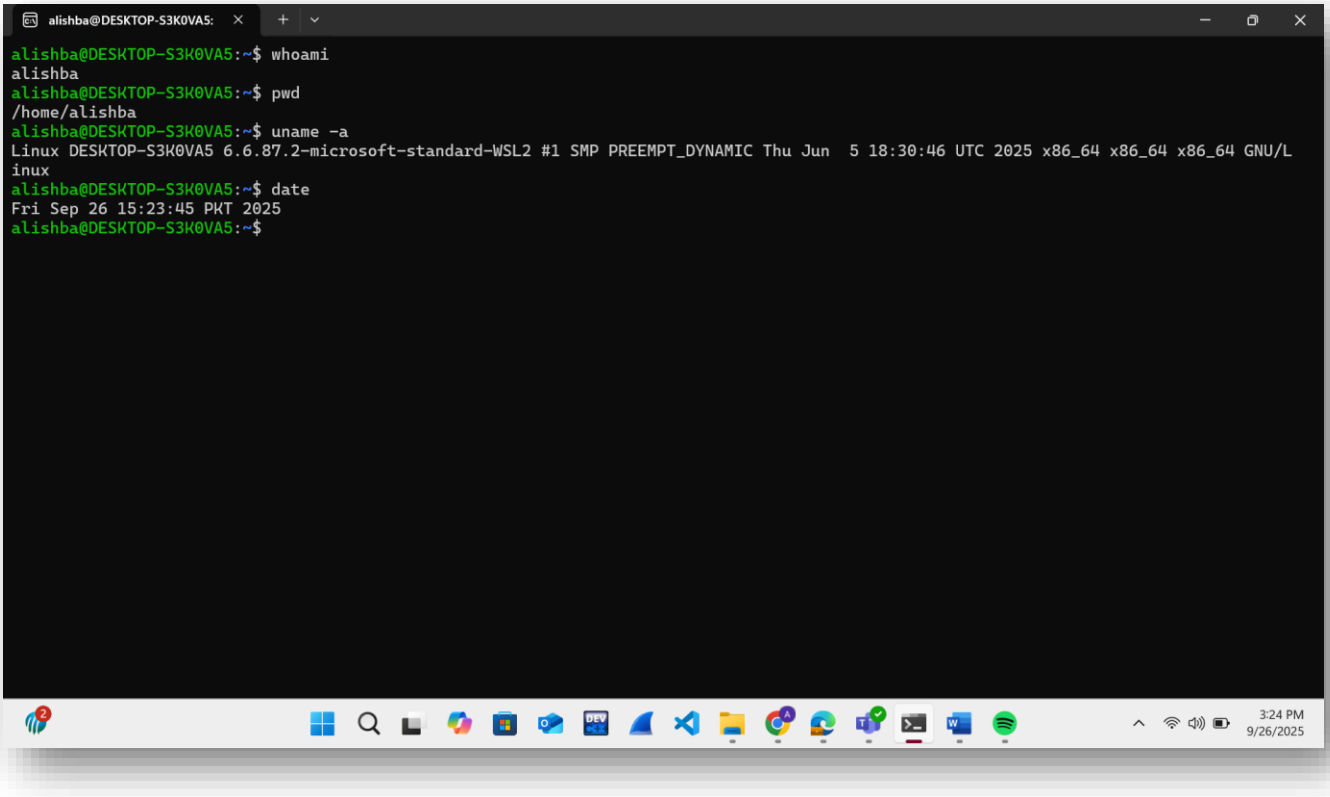
2

Semester:

5th

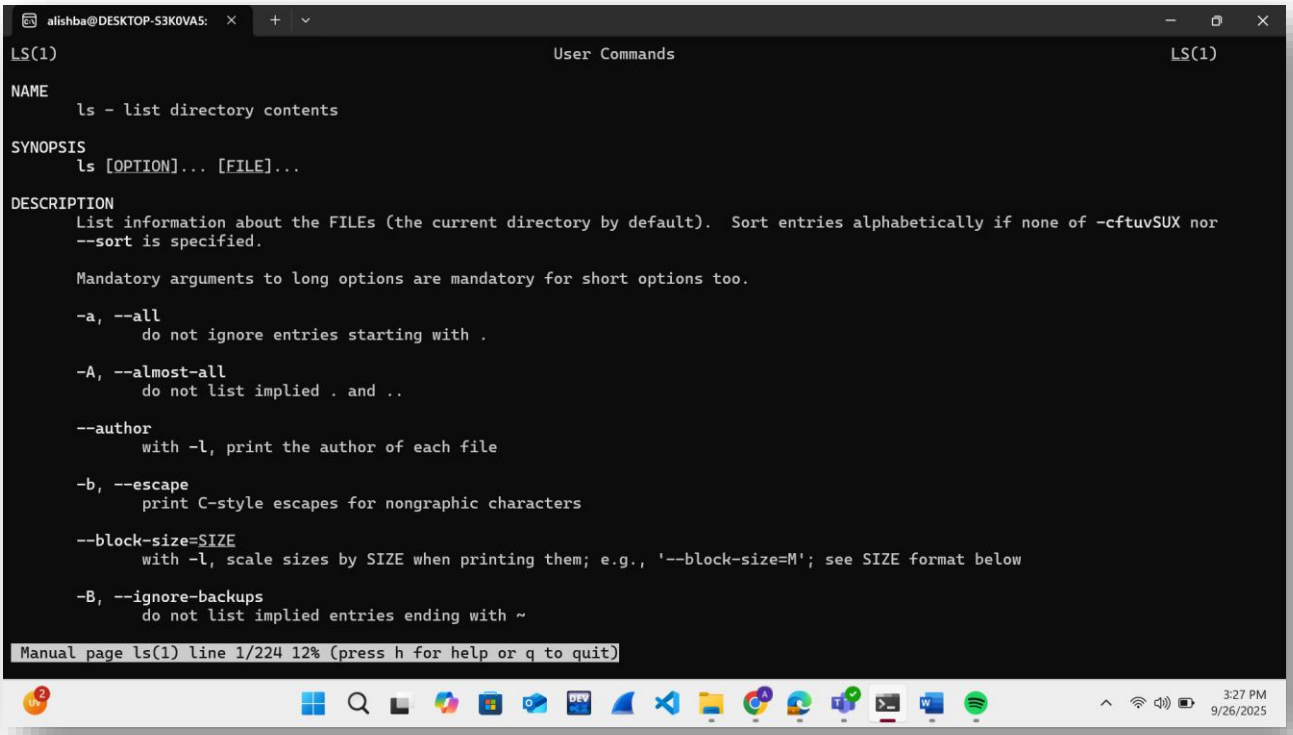
Part 1: Linux Environment Orientation

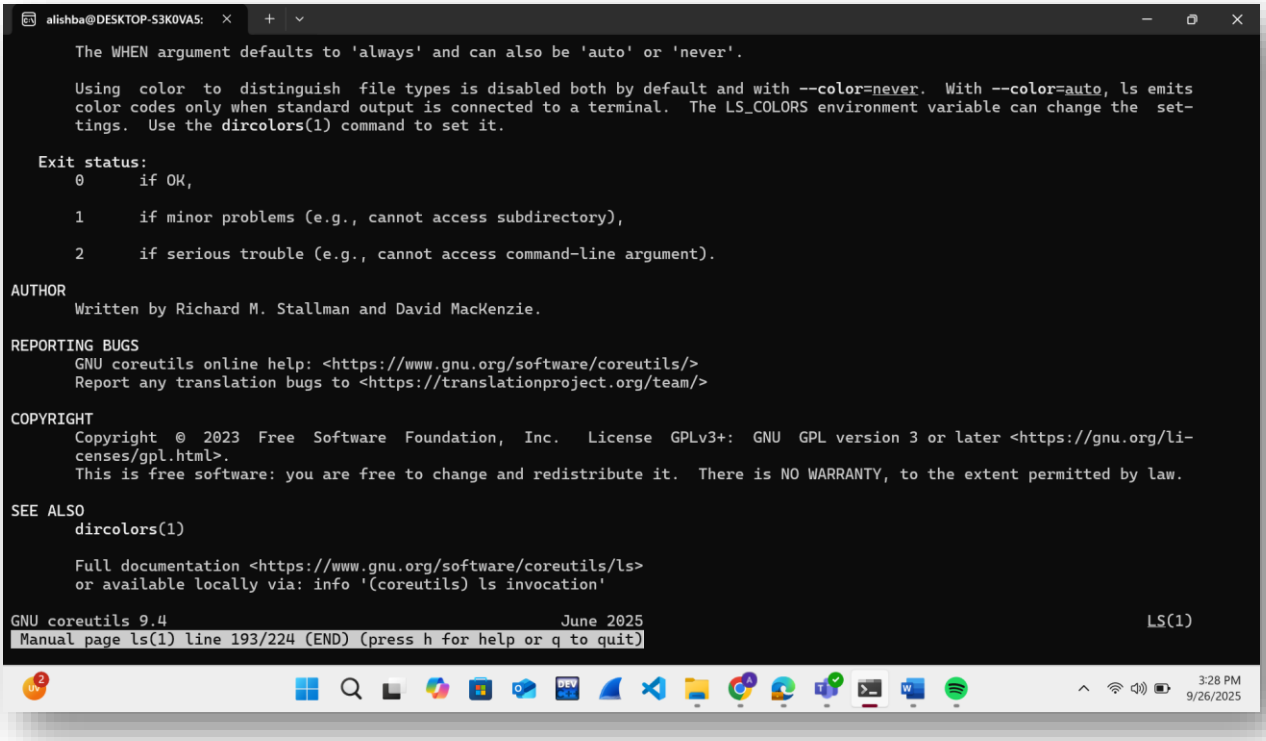
1.1 Understanding the Linux Environment



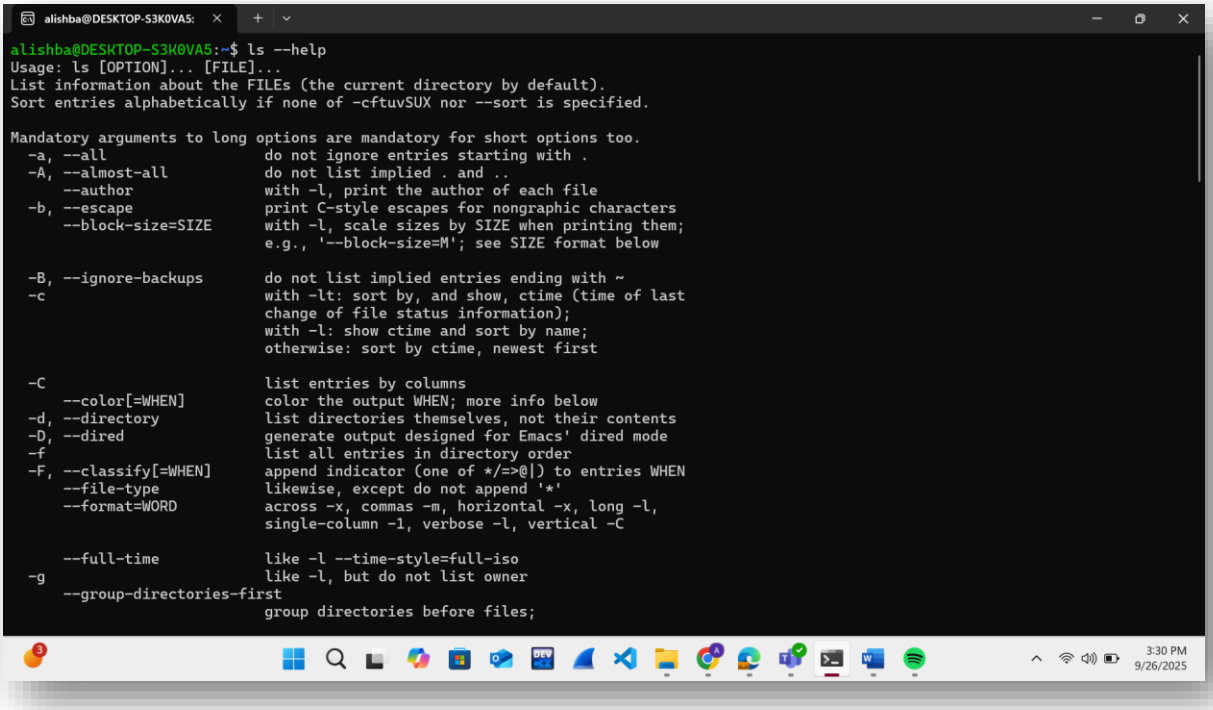
1.2 Getting Help in Linux

- ***man ls***

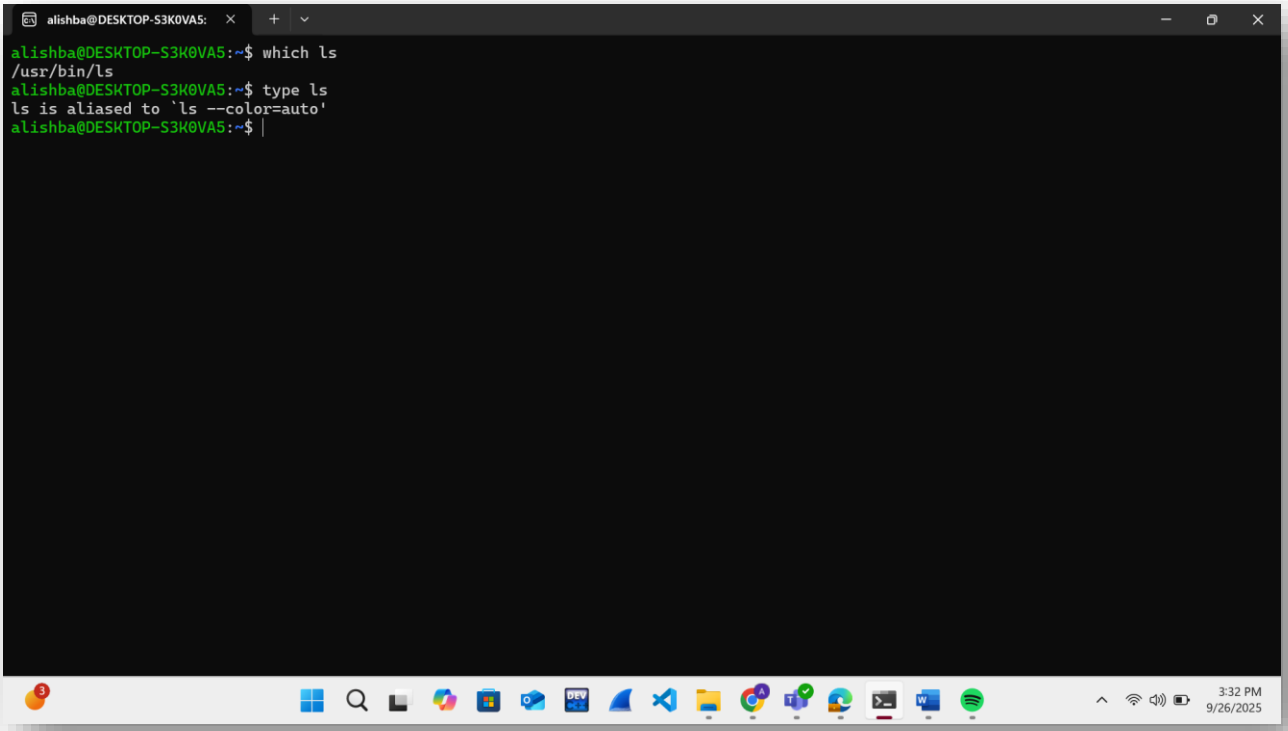



alishba@DESKTOP-S3K0VA5:
The WHEN argument defaults to 'always' and can also be 'auto' or 'never'.
Using color to distinguish file types is disabled both by default and with --color=never. With --color=auto, ls emits color codes only when standard output is connected to a terminal. The LS_COLORS environment variable can change the settings. Use the dircolors(1) command to set it.
Exit status:
0 if OK,
1 if minor problems (e.g., cannot access subdirectory),
2 if serious trouble (e.g., cannot access command-line argument).
AUTHOR
Written by Richard M. Stallman and David MacKenzie.
REPORTING BUGS
GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Report any translation bugs to <https://translationproject.org/team/>
COPYRIGHT
Copyright © 2023 Free Software Foundation, Inc. License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it. There is NO WARRANTY, to the extent permitted by law.
SEE ALSO
dircolors(1)
Full documentation <https://www.gnu.org/software/coreutils/ls>
or available locally via: info '(coreutils) ls invocation'
GNU coreutils 9.4 June 2025 LS(1)
Manual page ls(1) line 193/224 (END) (press h for help or q to quit)
3:28 PM
9/26/2025

- ***ls --help***

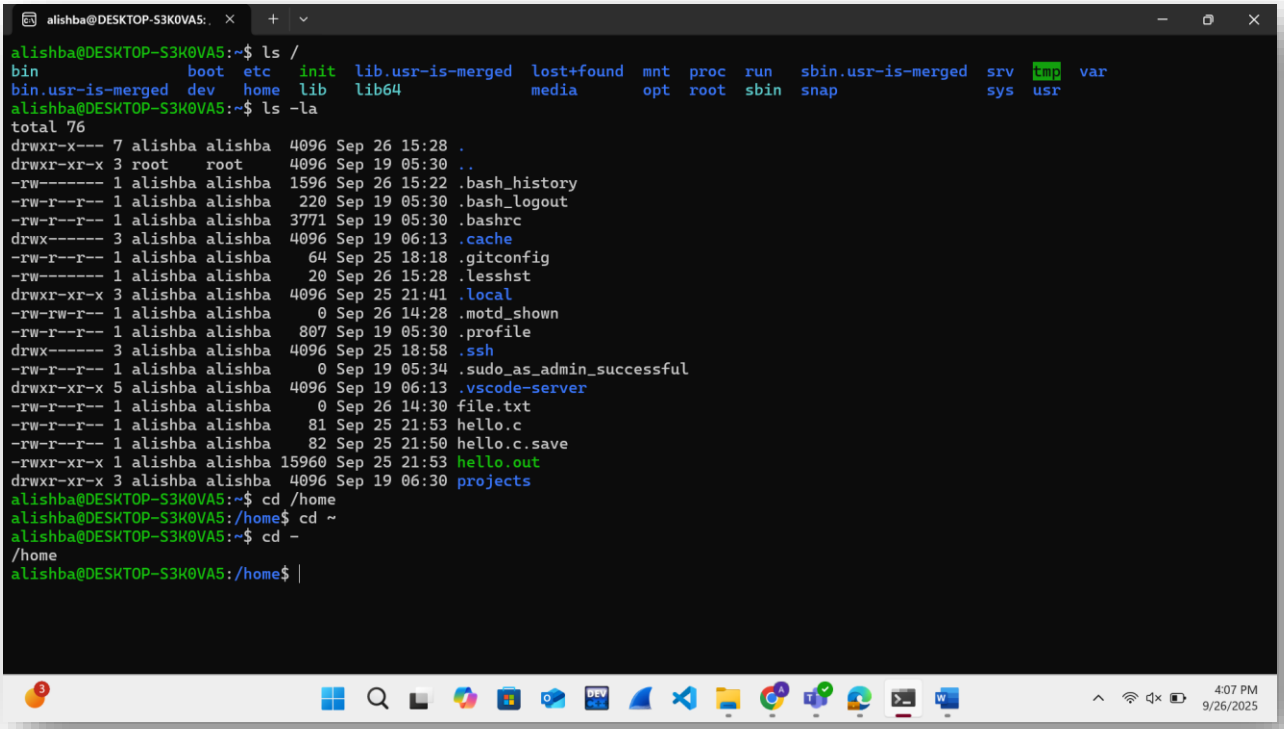

alishba@DESKTOP-S3K0VA5:
alishba@DESKTOP-S3K0VA5:~$ ls --help
Usage: ls [OPTION]... [FILE]...
List information about the FILEs (the current directory by default).
Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.
Mandatory arguments to long options are mandatory for short options too.
-a, --all do not ignore entries starting with .
-A, --almost-all do not list implied . and ..
--author with -l, print the author of each file
-b, --escape print C-style escapes for nongraphic characters
--block-size=SIZE with -l, scale sizes by SIZE when printing them;
e.g., '--block-size=M'; see SIZE format below
-B, --ignore-backups do not list implied entries ending with ~
-c with -lt: sort by, and show, ctime (time of last
change of file status information);
with -l: show ctime and sort by name;
otherwise: sort by ctime, newest first
-C list entries by columns
--color[=WHEN] color the output WHEN; more info below
-d, --directory list directories themselves, not their contents
-D, --dired generate output designed for Emacs' dired mode
-f list all entries in directory order
-F, --classify[=WHEN] append indicator (one of */=>@|) to entries WHEN
--file-type likewise, except do not append '*'
--format=WORD across -x, commas -m, horizontal -x, long -l,
single-column -1, verbose -l, vertical -C
--full-time like -l --time-style=full-iso
-g like -l, but do not list owner
--group-directories-first
group directories before files;
3:30 PM
9/26/2025

- ***which ls & type ls***

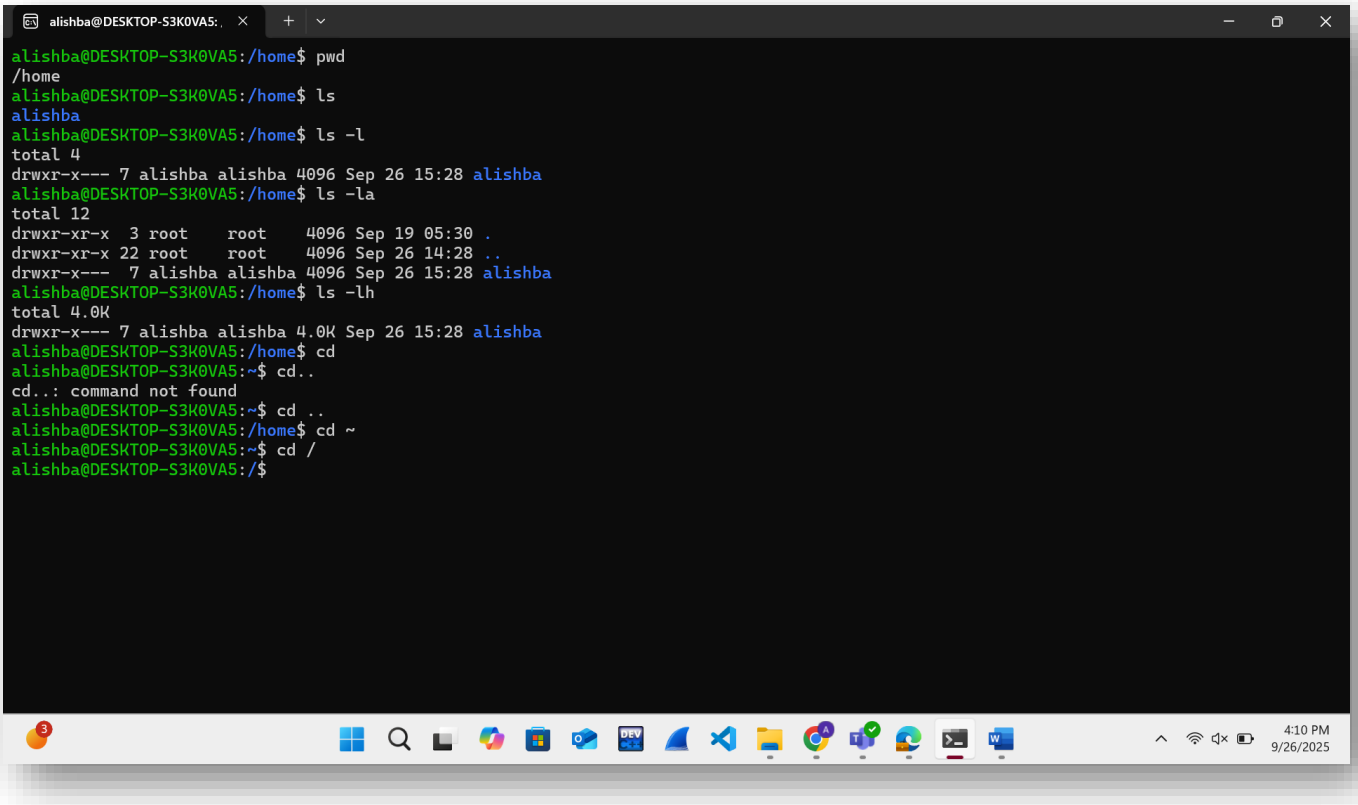


Part 2: File System Navigation

2.1 Understanding Linux Directory Structure



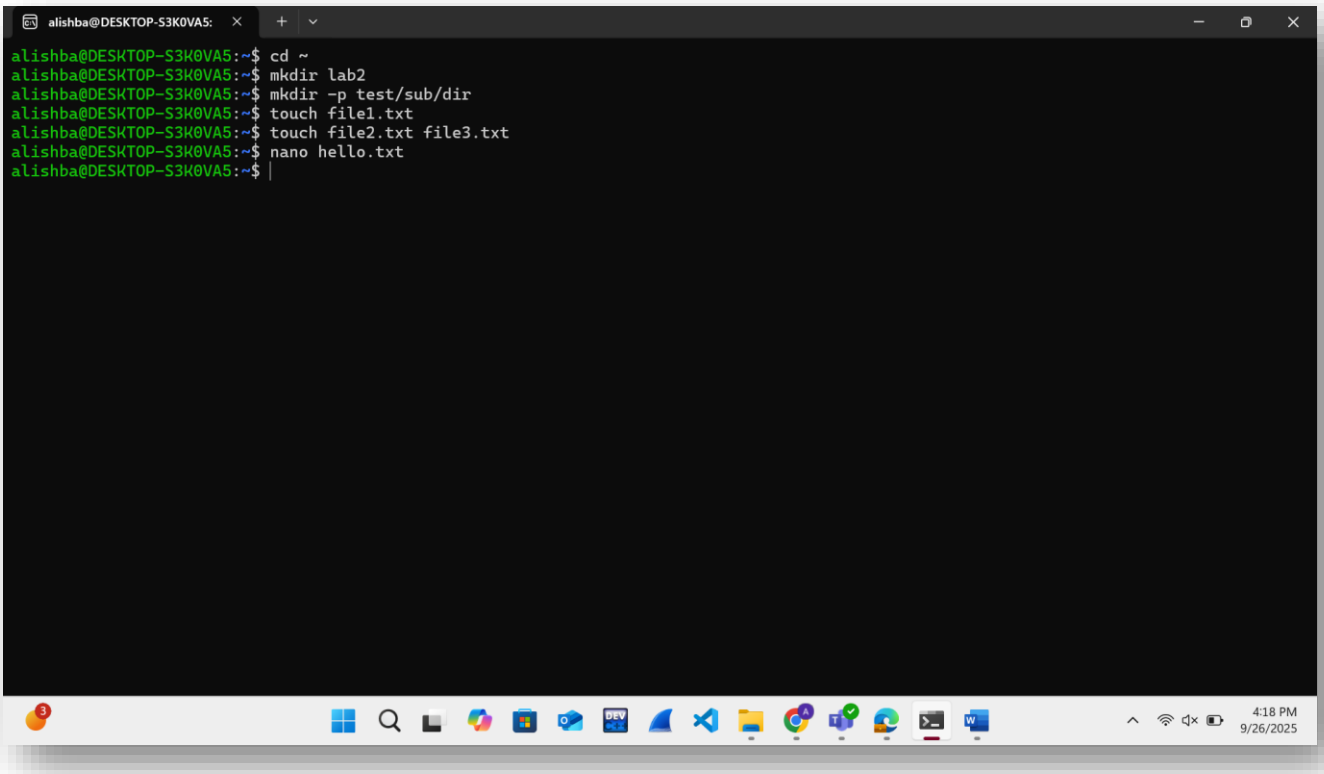
2.2 Basic Navigation Commands



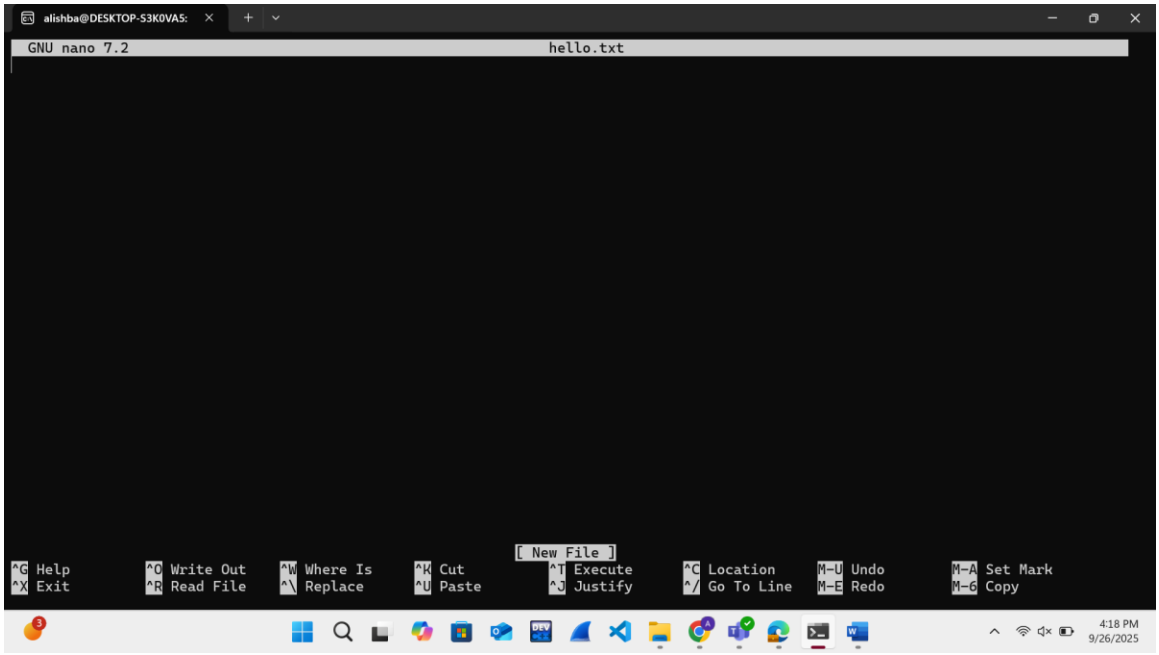
Part 3: File and Directory Operations

3.1 Creating and Managing Files/Directories

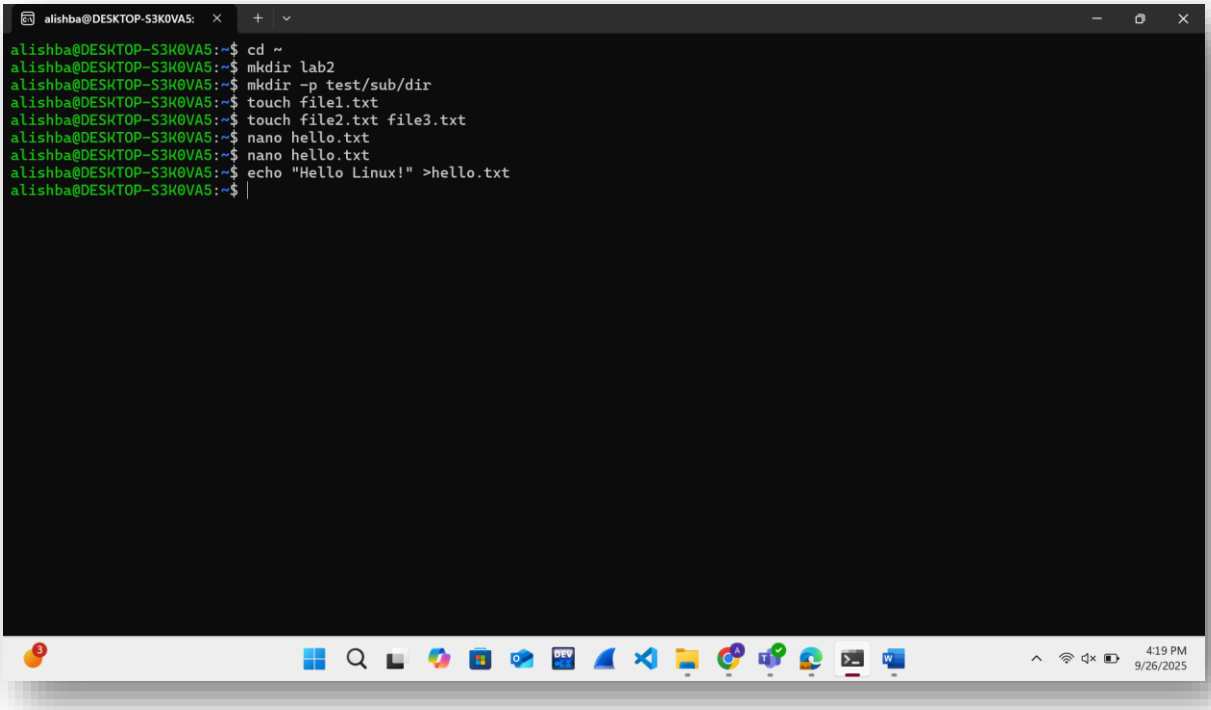
- **Commands for demonstration**



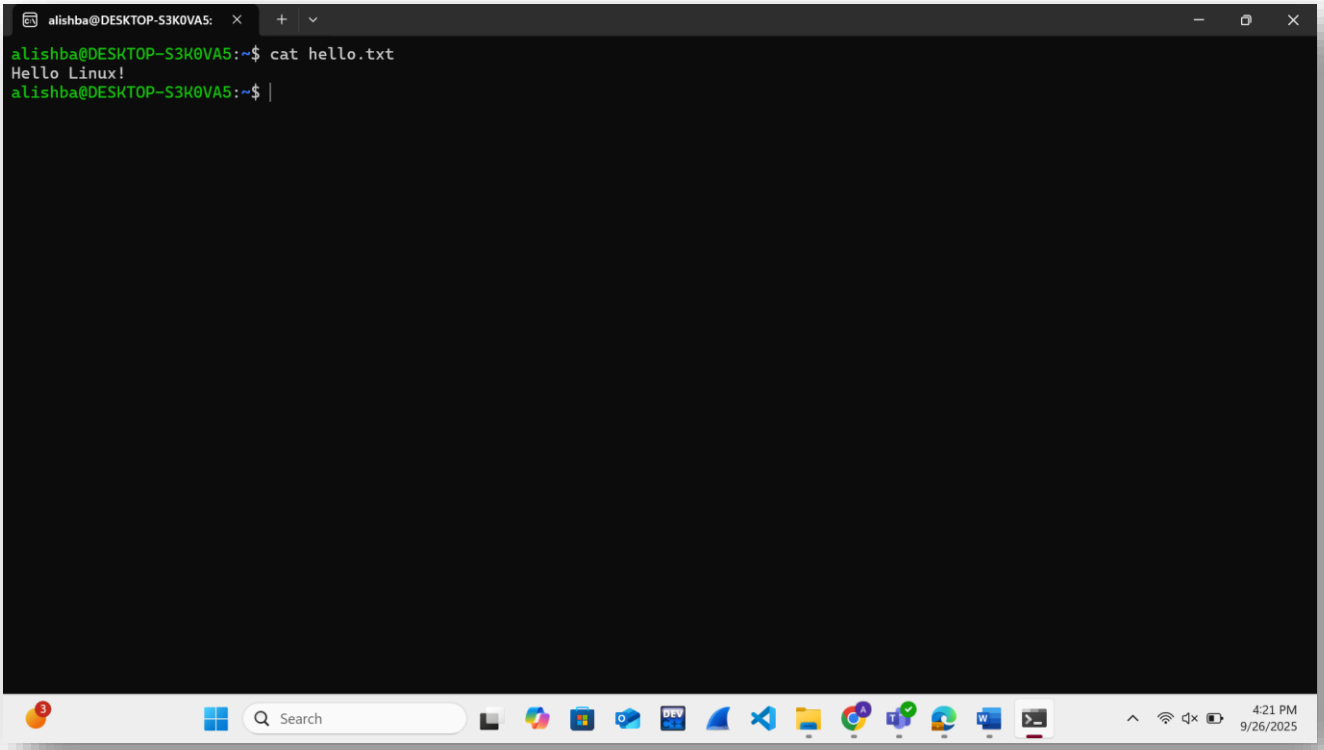
- ***nano hello.txt***



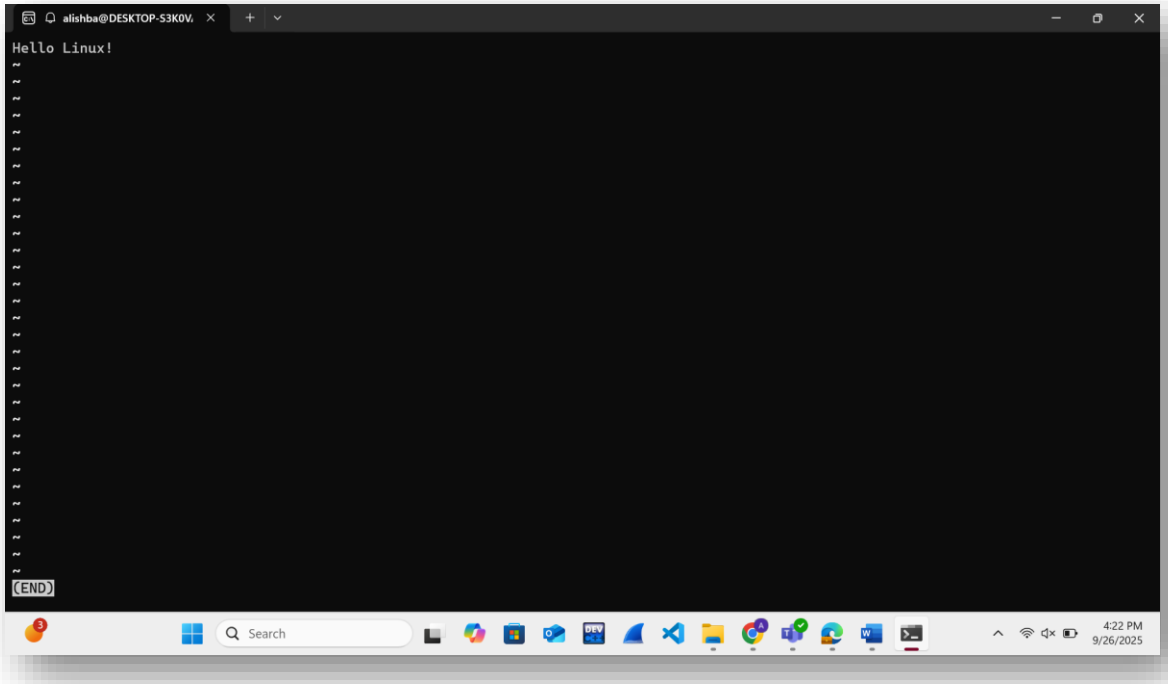
- ***other commands:***



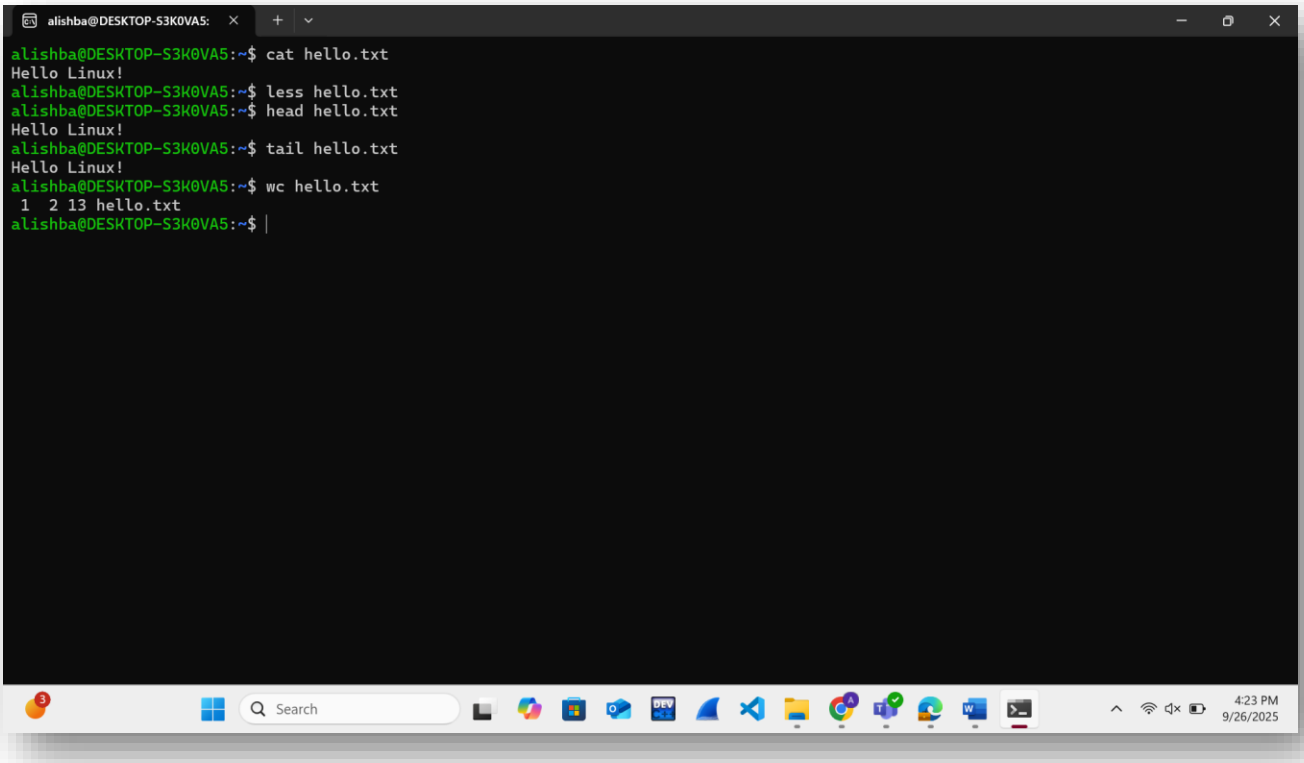
- **File viewing commands:**



- ***less hello.txt***

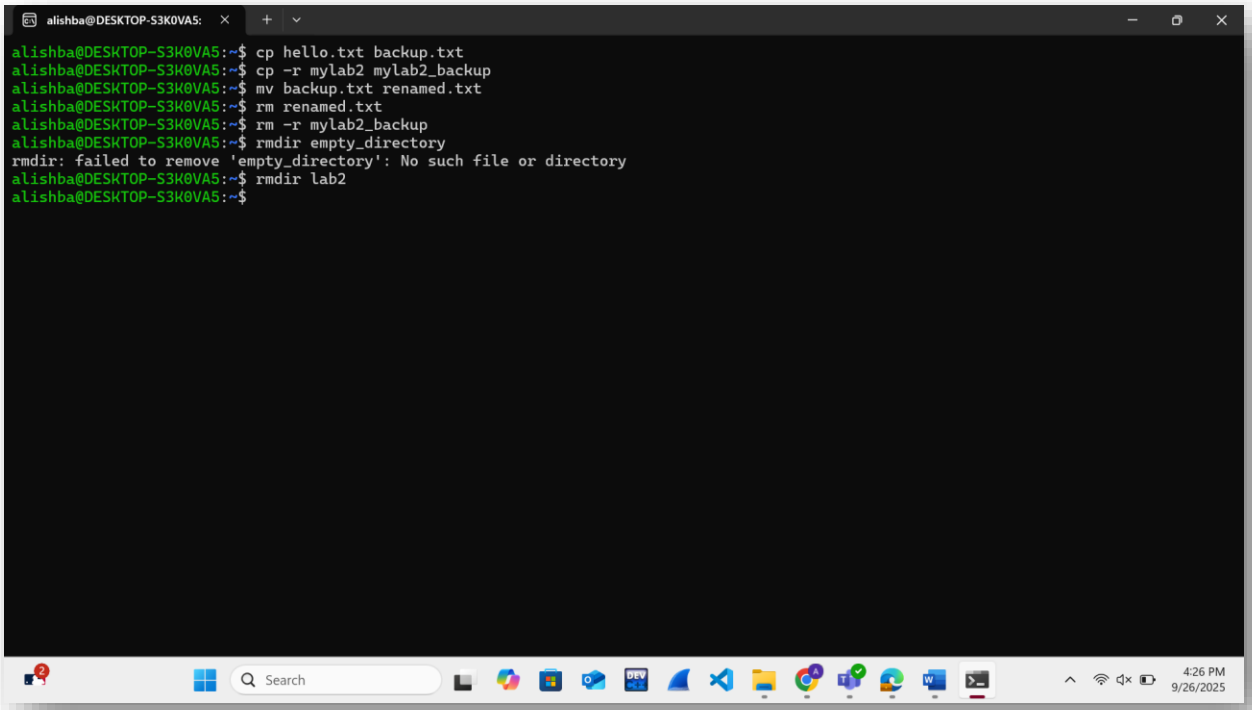


- ***other commands***



3.2 Copying, Moving, and Deleting

- **Commands to practice**



Part 4: File Permissions and Ownership

4.1 Understanding File Permissions