

Lab 4

CLI (Command Line Interface)

CLI VS GUI

Have to remember command	Easy to use and Intuitive
Keyboards	Mouse, keyboard shortcuts
Relatively fast	Relatively slow
Scripts enable automation and records	Manual labors required for repetitive tasks
Basic environment for developers	For daily users

- What are [Kernel](#) and [Shell](#)?

KERNEL: Core of OS that controls and communicates with hardware resource.

SHELL: Interface that allows users to communicate with kernel.

Users run applications and give commands through shell.

- Shell commands

- pwd: show the current path in a hierarchical history.
- cd: change directory.
- ls: list files and directories.

Ex) ls /bin: list files in the /bin directory.

ls -l: list files in the working directory in long format.

ls -l /etc /bin: list files in the /bin directory & /etc directory in long format.

ls -la . : list all files in the parent of the working directory in long format.

*Tips:

- Automation = "tab" key
- Past commands = "up arrow" key

- Manipulation

- cp: copy files and directories

Ex) cp file1 file2: copies contents of file1 into file2.

cp file1 dir1: copy the contents of file1 inside of directory dir1.

- mv: move files and directories or rename them.

Ex) mv file1 file2: if file2 doesn't exist, then file1 is renamed file2.

if file2 exists, its contents are replaced with the contents of file1.

mv file1 file2 dir1: file1 and file2 are moved to directory dir1.

- rm: delete files and directories *permanently and irreversely*.

- mkdir: make a new directory.