

Lab 5

I/O Redirection

- By default, standard output is screen, and standard input is from keyboard.
- Use “>” after command: create and save the output in file.
- Use “>>” : append output to existing file /create and write to a new file.
- Use “<”: Redirect input from a file.
- You can mix “<” and “>” together in a single line.
- Command “cat” displays the content of a text file.

Pipelines “|”

- Feeds output of previous command to input of next command.

(command1 | command2 | command3 | ...)

- Press “q” to exit the screen.

Expansion

- echo: prints out the text coming after “echo”.
- * : prints every file of currently working directory.
- ~ : prints home directory of current user.

Permissions

- Linux is a multi-user system.
- Files and directories have a permission assigned differently to owner, group, and others.

Ex)

	File type	Owner	Group	Others
	-	rw-	r--	r--
Meaning / Permission	regular	read O write O execute X	read O write X execute X	read O write X execute X

- "chmod" changes permissions.
- $rw\text{-} = 111$ in binary = 7 $rw\text{-} = 110$ in binary = 6
- $r\text{-}x = 110$ in binary = 5 $r\text{-} = 100$ in binary = 4

Superuser

- It has all system administration authority.
- Some commands need superuser's privileges.
- Put "sudo" before the command if you are a superuser.
- Type "exit" to get out of a superuser session.

History

: type "history" to see previous
command history(or save to text file).

wget

: download files from the internet directly
to your active directory.

curl

: fetching, uploading, and managing
data over the internet curl.

Grep (Global Regular Expression Print)

: searches text within files.

- -i: case-insensitive search.
- -v: invert the match.
- -n: display line numbers along with matching lines.

- -r: recursive search.
- .*: matches any character ('.') zero or more times (*').
- [abc]: matches any single character within the brackets.
- \d: matches any digit. (0-9)
- ^: matches the beginning of a line.
- \$: matches the end of a line.