**Basic Commands**

$HOME => /Users/chriskim

cd ~ => HOME 디렉터리로 이동

pwd => 현재 폴더의 디렉터리 경로 확인

echo => print

touch => 파일생성

export => 환경 변수 생성

**zshrc or zprofile**

zshrc (zsh run control)

• best file for adjusting the appearance and behavior of the shell

zprofile (zsh profile)

• ideal for commands that should be executed only when the terminal is opened, such as setting the $PATH environment variable

.zshrc(zsh run control) and .bashrc (bash run control)

Common things to put into such a file

• aliases

⁃ e.g. alias ll= ‘ls -l’

• exports - used to create or update EV

⁃ e.g. export PATH=$PATH:/some/path to add “/some/path” to the search path where macOS goes and looks for Terminal commands

• any other shell command that makes sense to you, echo may be useful for debugging

brew install python3.12 => /opt (optional)/homebrew/bin/python3

**PATH**

PATH도 Environment Variables 중에 하나이다.

Echo “export <variable name> = <value> >> ~/.<bash profile>

=> 선택된 파일에 export 값을 삽입

Export PATH=/path/to/directory:$PATH

=> export는 환경 변수 생성,

: 는 기존의 PATH값과 새로운 변수를 나누는 기준,

$PATH 는 기존의 모든 환경 변수를 포함

printenv => 모든 환경변수를 출력

printenv <variable name> => 해당 변수의 값을 출력

Ehco $<variable name> => 해당 변수의 값을 출력

**MacOS system folders**

**normal folders**

Library: Where fonts and other items used by applications are stored. This is not intended for personal file storage. Apps store the files that they need to function with in this directory.

Users: Contains the home folders of all users on Mac. It also includes a Shared folder for items available to all users.

Home: Named after the username. This contains all personal files.

Developer: Appears only if Apple’s Developer Tools are installed, for those who planning to make and publish apps for macOS

Network: Contains network-related devices, servers, libraries, etc.

Volumes: Includes mounted devices and volumes, such as hard disks, CDs, etc.

Root Directory (/): the topmost directory in macOS, parent to all other files and directories.

**system folders**

Bin (/bin)

• Holds essential common binaries necessary for booting OS and its proper functioning

• includes (pwd, chmod, bash, kill, zsh executable)

Sbin (/sbin)

• Contains essential system binaries and utilities for system administration. Somehow similar to Bin

• includes (ping, nfsd, route executable)

Opt (/opt)

• typically used for installing optional software packages that are not part of the core OS.

• homebrew

Etc (/etc)

• Contains local system configuration files, including administrative and system files.

• etc also contains (bashrc, alias, hosts, zshrc)

Etc/opt

• configuration files for add-on packages stored in /opt

• not having it yet

Lib (/lib)

• Libraries essential for the binaries in /bin and /sbin.

• not having it yet

Dev (/dev)

• Includes device files representing peripheral devices like KBD, mice, and trackpads.

Usr (/usr): A major hierarchy containing subdirectories with information, configuration files, and other essentials used by the operating system.

• /usr/bin: non-essential command binaries (not needed in single-user mode)

• /usr/sbin: non-essential system binaries (e.g., daemons for various network services)

• /usr/src/: source code (e.g., the kernel source code with its header files)

• /usr/lib: Libraries for the binaries in /usr/bin and /usr/sbin

Var (/var)

• Holds variable data, which includes files whose contents change as the operating system runs.

/sys: contains information about devices, drivers, and some kernel features.

Tmp (/tmp): A directory for temporary files and caches.