3. Homework

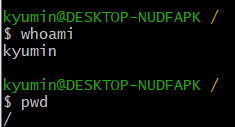
3.1 Do following steps.

1) Install VirtualBox+ubuntu or Cygwin in your PC (For Mac, open the terminal window and do the homework there). Refer to lect1 for installing Cygwin. For ubuntu, refer to Internet.

2) Log in to a Linux server. Find your login directory with "pwd". Find your user ID with "whoami".

$ pwd

$ whoami



Whoami 를 통해 이름 확인이 가능하다. Pwd 를 통해 현재 directory 확인이 가능하다.

3) Make a file, confirm the contents, and check its permission mode

텍스트, 스크린샷, 폰트이(가) 표시된 사진

자동 생성된 설명

Echo hello > f1 은 f1파일의 내용을 hello 라고 쓸 수 있다. Cat f1은 f1의 내용을 출력한다.

4) Change the permission mode of f1

The current mode is 110 100 100 (644). 1 means enabled while 0 disabled. First three bits are for the owner, the next three for group members, and the last three for all others. 110 for the owner means read, write bits are enabled but not execute bit; so the owner can read or write this file but cannot execute it.

$ chmod 000 f1

$ ls -l

............

---------- 1 inha inha 6 Feb 27 11:47 f1

............

Now no one including the owner cannot read, write, nor execute this file.

$ cat f1

cat: f1: Permission denied

$ chmod 777 f1

$ ls -l

............

-rwxrwxrwx 1 inha inha 6 Feb 27 11:47 f1

............

Now anyone can read/write/execute this file

5) Find out your current location again with "pwd".

$ pwd

6) Go to the root directory with "cd /" and make sure you are really at the top directory with "pwd".

$ cd /

$ pwd

7) How many files you have in the root directory? Some of them are not directory files. Find them with "ls -l". Use "file" command to see more detailed info.

$ ls -l

$ file \*

$ file lib

8) \* is a wild card character meaning it will be replaced by all file names in the current directory.

$ file \*

is same as

$ file app bin boot dev .... (all file names in the current directory)

$ file b\*

is same as

$ file bin boot

9) You can move around the file tree with cd.

Use just "cd" without path to go back to the login directory.

$ cd

$ pwd

/home/inha

$ cd /

$ pwd

/

$ cd

$ pwd

/home/inha

Make some directories and move inside.

$ mkdir d1

$ cd d1

$ pwd

/home/inha/d1

Use ".." to move up.

$ cd ..

$ pwd

/home/inha

$ cd ..

$ pwd

/home

You can go to any location using "absolute path". A path is absolute whenever it starts with "/".

$ cd /home/inha/d1

$ pwd

/home/inha/d1

If the path doesnot start with "/", it is "relative path". The system will find the destination starting at the current location.

$ cd

$ pwd

/home/inha

$ cd home/inha/d1

-bash: cd: home/inha/d1: No such file or directory

"home/inha/d1" is a relative path since it doesnot start with "/", so the system looks for "home" (the first directory in home/inha/d1") starting at "/home/inha" (the current location). There is no "home" in "/home/inha", so the system gives an error message.

$ cd inha/d1

-bash: cd: inha/d1: No such file or directory

Again error because there is no "inha" in the current location(/home/inha).

$ cd d1

$ pwd

/home/inha/d1

"d1" is ok because we have "d1" in /home/inha".

10) Go back to the login directory and Confirm your current location with "pwd".

$ cd

$ pwd

11) List all files in your directory with "ls" command.

12) Try "echo" command.

$ echo korea

korea

$ echo hello

hello

11) Try "echo" with ">" symbol. ">" is called "standard output redirection".

$ echo hello there > f2

">" sends "hello there" to file "f2" so there is no output shown in the terminal but you will have a new file f2 in the current directory.

$ ls

$ cat f2

12) Do "ls" to see you can find f1 in the current directory. Show its content with "cat".

$ ls

$ cat f1

13) Make a directory, d2, with "mkdir".

$ mkdir d2

14) Copy f1 into directory d2.

$ cp f1 d2 -- make a copy of f1 inside directory d2 under the same name.

$ cd d2

$ ls

$ cat f1

$ cd ..

$ cp f1 d1/f2 -- make a copy of f1 inside d1 under another name f2

$ cd d1

$ ls