Unix Basics for PIC Simulations

Hands-on session 1

Time: Tuesday (화) (10:00-13:00), Place: 대학원.토건관 418강의실

Outline

- Enter Unix World
- Editor vi



Enter Unix World

Login:guest ←account name

Password:******(abcdef) ←password

Change Password % passwd

Common Commands

% pwd (Present Working Directory)

/home/mclin/Desktop/PTSGcodes

% cd ../inp (Change Directory)

% ls *.inp (List all *.inp files)

% ls - l (long list)



% ls - l

```
-rwxrwxrwx  1  users  user  4564  Jun11  20:45   love
dr--r-----      2  users  user   547  Jun11  22:50   sub/
-rw-rw-r--      1  users  user  4135  Jun21  11:20   t1
  ↑  ↑  ↑         ↑      ↑      ↑       ↑          ↑
  u  g  o       owner  group  Size    Time       Name
```

% chmod u+x filename

% chmod 741 filename

0	000	---
1	001	--x
2	010	-w-
3	011	-wx
4	100	r--
5	101	r-x
6	110	rw-
7	111	rwx

% ls-a (List hidden files, eg .csrch .login)

% ls-F (Executables with *,Directory with /)

love ppd* t1* sub/ test/



% mkdir dname

% rmdir dname

% rm filename (delete filename)

% mv filename1 filename2 (Change name)

% cp [-i p r] filename target (copy)

i:to make sure

p: keep original time

r: copy children directories

% cat filename (>test)

List filename content and add it into test

% more filename

List filename content, stop for every screen.



% head –n filename

Print first n rows in filename

% tail –n filename (>>test)

Print last n rows in filename (and append it into test)

% grep –i string filename

Find rows containing “string” from filename, case insensitive.

% grep ‘ions’ filename

% find –name filename –print

Find location of filename, and print the path.



?,*,[ ],{ }

ls hw? →hw2,hw3,hw4
ls hw?? →hw11,hw12
ls hw* →hw2,hw3,hw4,hw11,hw12
ls hw[2-11] →hw2,hw3,hw4,hw11
ls hw{2,12} →hw2,hw12
ls test[a-c] →testa,testb,testc

alias

alias la ls-a ;
alias ch1 'cd /usr/john ; ls-l'
alias rm 'rm –i';
alias hm 'history | more '

unalias

Look for defined alias, Enter alias

編輯器vi

% vi filename

There are 2 modes in vi editor : (1) insert mode, (2) command mode

i,a,o,I,A,O ⇒ insert mode (Type Char (context))

ESC ⇒ command mode (Execution)

h(←), j(↓), k(↑), l(→)

nG	go to nth line
G	Go to the last line
^g	Show the number of row of the cursor
^f	shift down to next screen
^b	shift up to last screen

x	delete the char at the cursor
dd	delete one row
ndd	delete n rows
u	undo the last command
p,P	paste
/string	find string
:q!	quit
:zz	save(original name)
:w! filename	save as filename
:set ic	set case insensitive
:set nu	set to show line number
:1,$ s/string1/string2/g	substitute the string
:n1,n2 w! filename	Write from n1 to n2 into filename
:r filename	read in filename