CDA0017:
Operating Systems

Donghyun Kang (donghyun@changwon.ac.kr)

NOSLab (https://noslab.github.io)

Changwon National University

Basic commands for linux

- man : display the manual page (Important!!)
  - $ man mkdir (manual page for mkdir command)
  - $ man man (manual page for manual)

- cd : change directory
  - $ cd .. (change to upper directory)
  - $ cd / (go to root directory)
  - $ cd /home/(username)

Basic commands for linux

- ls : lists all files
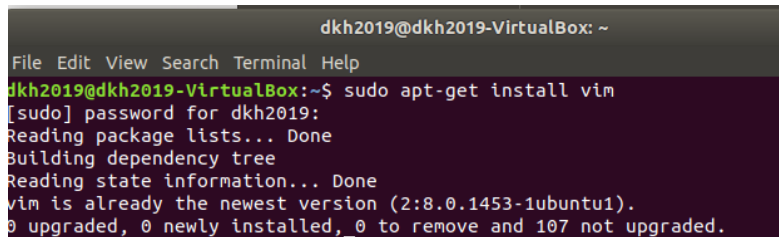   - $ ls
    - $ ls –al

- ps : list processes
    - $ ps
    - $ ps –ah

Basic commands for linux

- mkdir : make directories

  $mkdir test (make a directory named "test")

- mv : move or rename file

  $mv test.txt aaa.txt (rename test.txt into aaa.txt)

  $mv test.txt ../ (move test.txt to upper directory)

- cp : copy files

- rm : remove files

  - -r option should be attached for folder operation

Text editor (vim)

- Vi & Vim
    - Vi is the default editor in all UNIX operating systems
    - It may be hard to learn, but it is useful
    - You can easily install Vim
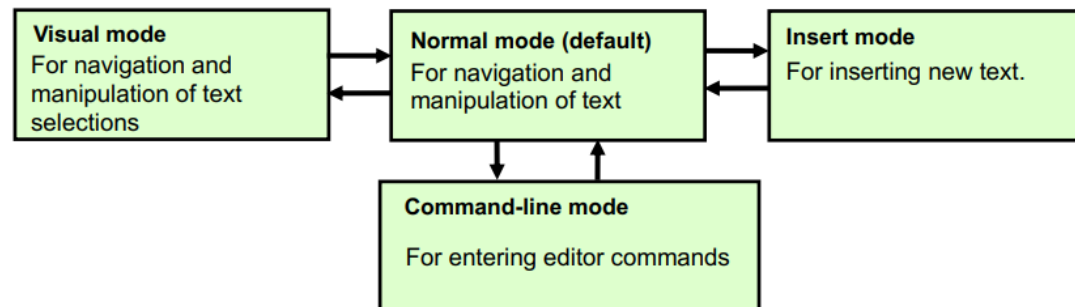 $ sudo apt-get install vim

Start of vim

- Start of vim
  - vi [filename]
    - If "data.txt" file exists, the file **opens**. otherwise, new file is **created**
  - example

    $ vi data2.txt

6 modes of vim
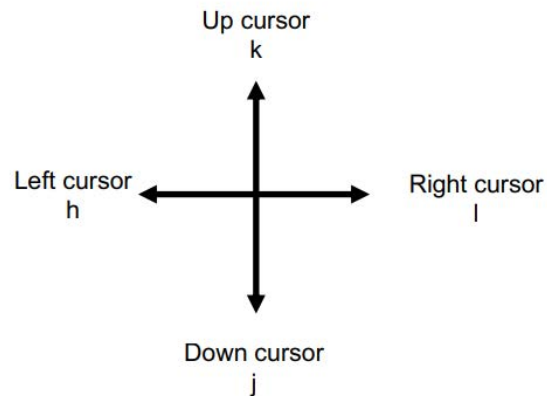
- Vim has 6 modes
    - Normal mode
    - Insert mode
    - Visual mode & select mode
    - Command-line mode & Ex-mode

- You can easily change between modes

Visual mode
For navigation and manipulation of text selections

Normal mode (default)
For navigation and manipulation of text

Insert mode
For inserting new text.

Command-line mode
For entering editor commands

Basic interface of vim

- **i, a, o, s** : Insert mode

- **v** : Visual mode

- **h, j, k, l** or (cursor keys) : Cursor movement

- **':' '/'** : Command mode

- **'Esc'** : return to normal mode

Up cursor
k

Left cursor
h

Right cursor
l

Down cursor
j

End of vim

- Exiting Vim in command-line mode
  - To save file
    - :w (name)
    - (If the file have been saved, you can omit the name)
  - To quit without saving
    - :q
  - To forcefully exit without saving changes
    - :q!
  - To save and exit (**recommended**)
    - **:wq**

Hello.c

#include <stdio.h>

int main(void){

        printf("Hello, world!");

        return 0;

}

How to compile & run?

- gcc –o hello hello.c

- ./a.out

Q & A