



Lab 3 for Operating Systems

Learning outcome

Upon successful completion of this lab, you will be able

- How to use some commands that **concern process** and **access the system** attributes
- To **use** the **word processor application** (**vi**)

Process Management

- **View** the **running process** on the system uses the **ps** (**process status**) command
 - Syntax: **ps [-option]**
 - **result**

PID	TTY	TIME	CMD
2412	tty1	00:00:00	bash
2433	tty2	00:00:00	ps
 - **option:**
 - **-a:** view all
 - **-ax:** view all process, even though the process is not concern with tty
 - **-axl:** view all process with the full command
- **Stop a process**
 - Requirement: the **PID** must be **known** → **???**
 - Syntax: **kill -9 PID**
 - Notes: if it is **careless**, the **system** is **hang**

Some **System command**

- **vmstat** (view status of virtual memory)
- **pstree -np**
- **pgrep** **<option>** **<parameter>**: list process following **name**, **properties** ... **pgrep --help**
=> full optionp
- **pkill** **<pattern>**
- **uptime**
- **free**


Editor program: **vi**

- Syntax: **vi <file_name>**
- Manipulation
 - Press **key i**: insert or type the content (in the left)
 - Press **key a**: insert or type the content (in the right)
 - **ESC key**: exit to command mode
 - The **key arrow** is used to move in the content

- Key x: delete a character
- Key dd: delete a row
- Command
 - :w: write file
 - :q: exit vi
 - :wq: write file and exit vi
 - :e!: delete all the content that typing after writing file
- Some other key function
 - Ctrl G: show the current line
 - G: end of file
 - 1G: begin of file
 - nG: goto n line

Submission

Upload the word file to cms describes some questions as

- Present the content of manipulating of some command (including syntax, what does it for?, capture two of examples for each command) as
 - pstree -np
 - pkill
 - uptime
 - free
- Capture the terminal screen using the "pgrep -u root" command. Explain the result of the capture
- How to open same "Task Manager" as Windows in Linux that shows the processes tab? Capture that windows (using both command and GUI on taskbar).
- How to open same "Add/Remove Program" as Windows in Linux that allows to update or remove the package software to OS? Capture that window.

Requirement

All the capture must be combination with full the windows including your accounts on the windows and the Linux OS (if it is not, you will be taken 0 mark). Should be use the capture in windows with jpg format to reduce the file size with your submitting

END