

# LAB 2: Linux Command & Scripting

## Objective

In lab 1, students has learned about fundamental of Linux command-line environment to perform basic system operations such as file management, directory management and permission management. Lab 2 is intended to provide students more experiences Linux commands by doing some tasks by using knowledge from lab 1. In this lab, students will learn about scripting language in Linux operating system which is called Bash.

## Reference

1. Cobbaut, P. (2015). Linux Fundamentals.
2. Duncan, S. P. (2012). The Linux Command Line. Software Quality Professional, 14(4), 51.
3. Unix concepts and applications, Fourth Edition, Sumitabha Das, TMH.

## Required Tasks:

1. Review of Unix/Linux general purpose utility command list : *man, who, cat, cd, cp, ps, ls, mv, rm, mkdir, rmdir, echo, more, date, time, kill, history, chmod, chown, \_nger, pwd, cal, logout, shutdown commands*
2. Login to the system and do the following:
  - ~~a) Use the appropriate command to determine your login shell~~
  - b) Use the `/etc/passwd` file to verify the result of previous step
  - c) Use the `who` command and redirect the result to a file called `your_name_mylab2a`.  
Use the `more` command to see the contents of `your_name_mylab2a`.
  - d) Use the `date` and `who` commands in sequence (in one line) such that the output of `date` will display on the screen and the output of `who` will be redirected to a

- file called `your_name_mylab2b`. Use the `more` command to check the contents of `your_name_mylab2b`
- e) Write a `sed` command that deletes the first character in each line in a file.
  - f) Write a `sed` command that deletes the character before the last character in each line in a file.
  - g) Write a `sed` command that swaps the first and second words in each line in a file.
3. Do the following :
- (a) pipe your `/etc/passwd` file to `awk`, and print out the home directory of each user.

## Practice

- Please read the provided documents about Linux Bash programming that was archived with this lab. Next week, you will do some task based on this programming. Please be ready for next week.