

Report Lab2

1. Review command:

- a. man: used to display the user manual of any command that we can run on the terminal.
 - b. Who: used to display the users that are currently logged into your Unix computer system.
 - c. cat: used to display content of file in terminal.
 - d. cd: used to change directory.
 - e. cp: used to copy file , group of file or directory.
 - f. ps: used to display or view information related to the processes running in a Linux system.
 - g. ls: It is used to list information about files and directories within the file system.
 - h. mv: used to move file , group of file or directory.
 - i. used to remove objects such as files, directories, symbolic links and so on from the file system like UNIX.
 - j. mkdir: used to make directory.
 - k. rmdir: used to remove empty directory.
 - l. echo: used to display line of text/string that are passed as an argument .
 - m. more: command is used to view the text files in the command prompt, displaying one screen at a time in case the file is large (For example log files).
 - n. date: used to display the system date and time.
 - o. time: used to determine the duration of execution of a particular command.
 - p. kill: used to terminate processes manually.
 - q. history: used to view the previously executed command.
 - r. chmod: used to change the access permissions of file or directory.
 - s. chown: used to change owner of file or directory.
 - t. finger: used to display user information lookup command which gives details of all the users logged in.
 - u. pwd: use to prints the path of the working directory.
 - v. cal: used to see the calendar of a specific month or a whole year.
 - w. logout: used to Logout of a login shell.
 - x. shutdown: used to power-off or reboot the machine computer.
- ### 2. Login to the system and do the following:
- a. Use the appropriate command to determine your login shell

```
leang@leang-x550vx ~ ➤ echo $SHELL
/usr/bin/zsh
leang@leang-x550vx ~ ➤
```

- b. Use the `/etc/passwd` file to verify the result of previous step

```
leang@leang-x550vx ~$ cat /etc/passwd
root:x:0:0:/root:/bin/bash
nobody:x:65534:65534:Nobody:/:usr/bin/nologin
dbus:x:81:81:System Message Bus:/:usr/bin/nologin
bin:x:1:1:/:usr/bin/nologin
daemon:x:2:2:/:usr/bin/nologin
mail:x:8:12:/var/spool/mail:/usr/bin/nologin
ftp:x:14:11:/srv/ftp:/usr/bin/nologin
http:x:33:33:/srv/http:/usr/bin/nologin
systemd-journal-remote:x:982:982:systemd Journal Remote:/:usr/bin/nologin
systemd-network:x:981:981:systemd Network Management:/:usr/bin/nologin
systemd-resolve:x:980:980:systemd Resolver:/:usr/bin/nologin
systemd-timesync:x:979:979:systemd Time Synchronization:/:usr/bin/nologin
systemd-coredump:x:978:978:systemd Core Dumper:/:usr/bin/nologin
uuidd:x:68:68:/:usr/bin/nologin
dhcpcd:x:977:977:dhcpcd privilege separation:/var/lib/dhcpcd:/usr/bin/nologin
dnsmasq:x:976:976:dnsmasq daemon:/:usr/bin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/usr/bin/nologin
avahi:x:974:974:Avahi mDNS/DNS-SD daemon:/:usr/bin/nologin
colord:x:973:973:Color management daemon:/var/lib/colord:/usr/bin/nologin
cups:x:209:209:cups helper user:/:usr/bin/nologin
Flatpak:x:972:972:Flatpak system helper:/:usr/bin/nologin
geoclue:x:971:971:Geoinformation service:/var/lib/geoclue:/usr/bin/nologin
git:x:970:970:git daemon user:/:usr/bin/git-shell
mpd:x:45:45:/var/lib/mpd:/usr/bin/nologin
nm-openconnect:x:969:969:NetworkManager OpenConnect:/:usr/bin/nologin
nm-openvpn:x:968:968:NetworkManager OpenVPN:/:usr/bin/nologin
ntp:x:87:87:Network Time Protocol:/var/lib/ntp/bin/false
polkitd:x:102:102:PolicyKit daemon:/:usr/bin/nologin
rtkit:x:133:133:RealtimeKit:/proc:/usr/bin/nologin
sddm:x:967:967:Simple Desktop Display Manager:/var/lib/sddm:/usr/bin/nologin
tss:x:966:966:tss user for tpm2:/:usr/bin/nologin
usbmux:x:140:140:usbmux user:/:usr/bin/nologin
leang:x:1000:1000:leang:/home/leang:/usr/bin/zsh
nvidia-persistenced:x:143:143:NVIDIA Persistence Daemon:/:usr/bin/nologin
named:x:40:40:BIND DNS Server:/:usr/bin/nologin
mssql:x:965:965:/var/opt/mssql:/bin/bash
sambath:x:1001:1001:/home/sambath:/bin/bash
sokpheak:x:1002:1002:/home/sokpheak:/bin/bash
leang@leang-x550vx ~$ cat /etc/passwd | grep "leang"
leang:x:1000:1000:leang:/home/leang:/usr/bin/zsh
leang@leang-x550vx ~$
```

- 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`.

```
leang@leang-x550vx ~$ who > /home/leang/RUPP/OS_RUPP/lab2/lab2/NgounMengleang_Mylab2a.txt
leang@leang-x550vx ~$ cat /home/leang/RUPP/OS_RUPP/lab2/lab2/NgounMengleang_Mylab2a.txt
leang  tty1          2020-10-28 12:43 (:0)
leang  pts/0          2020-10-28 12:43 (:0)
leang  pts/1          2020-10-28 12:46 (:0)
leang  pts/2          2020-10-28 12:55 (:0)
leang@leang-x550vx ~$
```

- d. Use `date` and `who` in one line.

```
leang@leang-x550vx ~$ date;who > /home/leang/RUPP/OS_RUPP/lab2/lab2/NgounMengleang_Mylab2b.txt
Wed Oct 28 01:14:59 PM +07 2020
leang@leang-x550vx ~$ cat /home/leang/RUPP/OS_RUPP/lab2/lab2/NgounMengleang_Mylab2b.txt
leang  tty1          2020-10-28 12:43 (:0)
leang  pts/0          2020-10-28 12:43 (:0)
leang  pts/1          2020-10-28 12:46 (:0)
leang  pts/2          2020-10-28 12:55 (:0)
leang@leang-x550vx ~$
```

- e. Write a `sed` command that deletes the first character in each line in a file. regex for search `^`.

```
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ± cat regxp.txt
The,pen is mightier than the sword
Alice everyday goes to library to study
Perhaps the decline of this country has already started
The management of your company has executed its duties excellently
People,who live in glass houses should not throw stones
They have lost thousands of jobs to Asia, South America, and Mexico
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ± sed 's/^./gm' regxp.txt
he,pen is mightier than the sword
lice everyday goes to library to study
erhaps the decline of this country has already started
he management of your company has executed its duties excellently
eople,who live in glass houses should not throw stones
hey have lost thousands of jobs to Asia, South America, and Mexico
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ±
```

- f. Write a sed command that deletes the character before the last character in each line in a file. Regex for search `.(.)$`

```
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ± cat regxp.txt
The,pen is mightier than the sword
Alice everyday goes to library to study
Perhaps the decline of this country has already started
The management of your company has executed its duties excellently
People,who live in glass houses should not throw stones
They have lost thousands of jobs to Asia, South America, and Mexico
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ± sed 's/./\$/gm' regxp.txt
The,pen is mightier than the swod
Alice everyday goes to library to stuy
Perhaps the decline of this country has already startd
The management of your company has executed its duties excellenty
People,who live in glass houses should not throw stons
They have lost thousands of jobs to Asia, South America, and Mexio
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ±
```

- g. Write a sed command that swaps the first and second words in each line in a file. Regex for search `^(w+)([|,])(w+)`

```
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ± cat regxp.txt
The,pen is mightier than the sword
Alice everyday goes to library to study
Perhaps the decline of this country has already started
The management of your company has executed its duties excellently
People,who live in glass houses should not throw stones
They have lost thousands of jobs to Asia, South America, and Mexico
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ± sed 's/^(w+)\([ |,]\)(w+)/\3\2\1/gm' regxp.txt
pen,The is mightier than the sword
everyday Alice goes to library to study
the Perhaps decline of this country has already started
management The of your company has executed its duties excellently
who,People live in glass houses should not throw stones
have They lost thousands of jobs to Asia, South America, and Mexico
leang@leang-x550vx > ~/RUPP/OS_RUPP/lab2/lab2 > ? main ±
```

3. Do the following :

```
leang@leang-x550vx ~$ cat /etc/passwd | awk -F : '{print $1 " is at " $6}'
root is at /root
nobody is at /
dbus is at /
bin is at /
daemon is at /
mail is at /var/spool/mail
ftp is at /srv/ftp
http is at /srv/http
systemd-journal-remote is at /
systemd-network is at /
systemd-resolve is at /
systemd-timesync is at /
systemd-coredump is at /
uudd is at /
dhcpcd is at /var/lib/dhcpcd
dnsmasq is at /
rpc is at /var/lib/rpcbind
avahi is at /
colord is at /var/lib/colord
cups is at /
flatpak is at /
geoclue is at /var/lib/geoclue
git is at /
mpd is at /var/lib/mpd
nm-openconnect is at /
nm-openvpn is at /
ntp is at /var/lib/ntp
polkitd is at /
rtkit is at /proc
sddm is at /var/lib/sddm
tss is at /
usbmux is at /
leang is at /home/leang
nvidia-persistenced is at /
named is at /
mssql is at /var/opt/mssql
sambath is at /home/sambath
sokpheak is at /home/sokpheak
leang@leang-x550vx ~$ cat /etc/passwd | awk -F : '/home/ {print $1 " is at " $6}'
leang is at /home/leang
sambath is at /home/sambath
sokpheak is at /home/sokpheak
leang@leang-x550vx ~$
```