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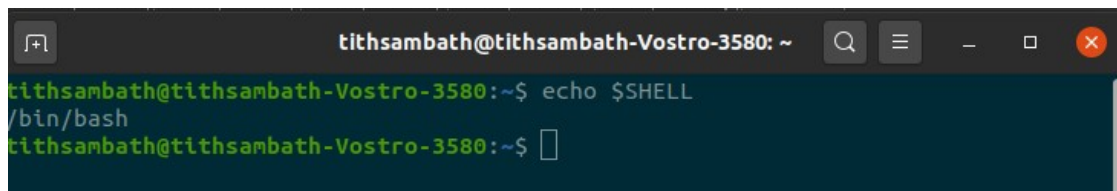
Homework 02

1. Review of Unix/Linux general purpose utility command :

- man : display the user manual of any **command** that we can run on the terminal.
- Who : displays a list of users who are currently logged into the computer.
- Cat : allows us to create single or multiple files, view content of file, concatenate files and redirect output in terminal or files.
- Cd : used to change the current working directory in Linux.
- cp : used to copy files or group of files or directory.
- Ps : used to list the currently running processes.
- Ls : used to list all file and directory in current working directory
- mv : is a *command* line utility that moves files or directories from one place to another.
- Rm : used to remove files or directories
- mkdir : used to create directory
- rmdir : used remove empty directories from the file system in **Linux**.
- Echo : used to display line of text/string that are passed as an argument.
- More : used to view the text files in the command prompt, displaying one screen at a time in case the file is large. (Ex : more +30 sample.txt)
- date : used to display the system **date** and time.
- Time : used to determine how long a given **command** takes to run.
- Kill : used to terminate processes manually.
- History : used to show you all of the last *commands* that have been recently used.
- Chmod : used to change the access mode of a file and directory.
- Chown : used to changing the owner of a given file **or** folder.
- Pwd : used to print current working directory.
- Cal : is a calendar command in Linux which is used to see the calendar of a specific month or a whole year.
- Logout : to **log out** of the **terminal**.
- Shutdown command : used to turn off a computer.

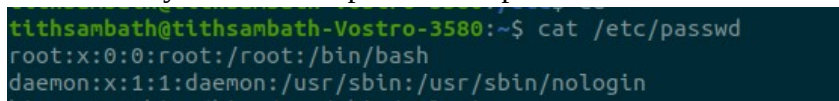
2. Login to the system and do the following :

- a. Use the appropriate command to determine your login shell :
 - ➔ To determine login shell use this command : `$ echo $SHELL`



```
tithsambath@tithsambath-Vostro-3580: ~  
tithsambath@tithsambath-Vostro-3580:~$ echo $SHELL  
/bin/bash  
tithsambath@tithsambath-Vostro-3580:~$
```

- b. Use the `/etc/passwd` file to verify the result of previous step
 - ➔ To verify the result of previous step use this command : `cat /etc/passwd`



```
tithsambath@tithsambath-Vostro-3580:~$ cat /etc/passwd  
root:x:0:0:root:/root:/bin/bash  
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
```

- c. Use the `who` command and redirect the result to a file called `your_name_mylab2a`.
 - ➔ To redirect the result to a file with `who` command use this `>`
e.g : `who > Tithsambath_Dyly_mylab2a.txt`

```
tithsambath@tithsambath-Vostro-3580:~/Documents/Rupp/ITE/Year III/Operating System/Homework/OS-Personal-Homework-Y3/Lab2/lab2 - Linux Command & Scripting Introduction$ who > Tithsambath_Dyly_mylab2a.txt
tithsambath@tithsambath-Vostro-3580:~/Documents/Rupp/ITE/Year III/Operating System/Homework/OS-Personal-Homework-Y3/Lab2/lab2 - Linux Command & Scripting Introduction$ cat Tithsambath_Dyly_mylab2a.txt
tithsambath :0                2020-10-27 07:54 (:0)
```

- d. Use the date and who commands in sequence (in one line)

```
tithsambath@tithsambath-Vostro-3580: ~/Documents/Rupp/IT...
tithsambath@tithsambath-Vostro-3580:~/Documents/Rupp/ITE/Year III/Operating System/Homework/OS-Personal-Homework-Y3/Lab2/lab2 - Linux Command & Scripting Introduction$ date;who > Tithsambath_Dyly_mylab2b.txt
Tue 27 Oct 2020 08:40:57 AM +07
tithsambath@tithsambath-Vostro-3580:~/Documents/Rupp/ITE/Year III/Operating System/Homework/OS-Personal-Homework-Y3/Lab2/lab2 - Linux Command & Scripting Introduction$ more Tithsambath_Dyly_mylab2b.txt
tithsambath :0                2020-10-27 07:54 (:0)
```

- e. Write a sed command that deletes the first character in each line in a file

```
tithsambath@tithsambath-Vostro-3580:~$ cat myfile
Hello World

Fast Food

Real Life

Cow Boy
tithsambath@tithsambath-Vostro-3580:~$ sed 's/^./' myfile
ello World

ast Food

eal Life

ow Boy
tithsambath@tithsambath-Vostro-3580:~$
```

- f. Write a sed command that deletes the character before the last character in each line in a file

```
tithsambath@tithsambath-Vostro-3580:~$ cat myfile
Hello World

Fast Food

Real Life

Cow Boy
tithsambath@tithsambath-Vostro-3580:~$ sed 's/\\(\\.\\)\\(\\.\\)$/\\2/' myfile
Hello Word

Fast Fod

Real Lie

Cow By
tithsambath@tithsambath-Vostro-3580:~$
```

- g. Write a sed command that swaps the first and second words in each line in a file

```
tithsambath@tithsambath-Vostro-3580:~$ cat myfile
Hello World

Fast Food

Real Life

Cow Boy
tithsambath@tithsambath-Vostro-3580:~$ sed 's/^\(\w\{3,\}\) \(\w\{3,\}\)/\2 \1/gm' myfile
World Hello

Food Fast

Life Real

Boy Cow
tithsambath@tithsambath-Vostro-3580:~$
```

3. (a) pipe your /etc/passwd file to awk, and print out the home directory of each user.

```
tithsambath@tithsambath-Vostro-3580:~$ cat /etc/passwd | awk -F : '{print $6}'
cat: /etc/passwd/: Not a directory
tithsambath@tithsambath-Vostro-3580:~$ cat /etc/passwd | awk -F : '{print $6}'
/root
/usr/sbin
/bin
/dev
/bin
/usr/games
/var/cache/man
/var/spool/lpd
/var/mail
/var/spool/news
/var/spool/uucp
/bin
/var/www
/var/backups
/var/list
/var/run/ircd
/var/lib/gnats
/nonexistent
/run/systemd
/run/systemd
/run/systemd
/nonexistent
/home/syslog
/nonexistent
/var/lib/tpm
/run/uidd
/nonexistent
/var/lib/avahi-autoipd
/var/lib/usbmux
/proc
/var/lib/misc
/home/cups-pk-helper
/run/speech-dispatcher
/var/run/avahi-daemon
/
/var/lib/saned
/var/lib/openvpn/chroot
/run/hplip
/nonexistent
/var/lib/colord
/var/lib/geoclue
/var/run/pulse
/run/gnome-initial-setup/
/var/lib/gdm3
/home/tithsambath
/
/var/opt/mssql
/var/spool/postfix
/home/tith
tithsambath@tithsambath-Vostro-3580:~$
```