LAB – 03 PRELAB

- ☐ **All screenshots, must have your username at command prompt and screenshot should be legible.** Snipping tool is advised for the screen shots, no full page screenshot.
- ☐ **For LAB REPORT, The screenshots should be pasted in Word Document in order of the lab questions and submitted in Blackboard as a single document only. Plagiarism is awarded zero.**
- ☐ Refer to course details posted in BB for more info on Lab report and screenshots.
- ☐ **Do NOT login as root or user with UID=0 to do the lab, use sudo ONLY when required.**
- ☐ **Do not use changeme username** to do the lab, the lab(s) MUST be done using your own username as specified in PART-B of LAB-1
- ☐ **Strictly NO screenshots with full screen of terminal or desktop or partly taken screenshots**
- ☐ **It is highly required to following naming conventions and instructions and it would affect evaluation.**

PRE-LAB ACTIVITY: PART-A,B,C *(need to be completed before start of LAB-03)*

In toronto VM

PART-A: UNIX/LINUX FILE HIERARCHY STANDARD(FHS)

1. Find purpose of the directories by getting the description of the file system hierarchy using **man hier.** Identify the directory for the given descriptions below:

i)	provides information about running processes and the kernel	**ii)**	contains static files for boot loader and holds files required to boot only.
iii)	users home directory	**iv)**	log files
v)	home directory of root	**vi)**	configuration files
vii)	temporary mount systems	**viii)**	device files
ix)	system administration binary files not required for boot	**x)**	when new user created files are copied to the user home directory from here
xi)	object libraries, dynamic libraries including some executables	**xii)**	directory which should hold those shared libraries that are necessary to boot the system and to run the commands in the root filesystem
xiii)	manual pages	**xiv)**	mailboxes

Enter the answers for the above in your lab report based on the numbers given as **i)** *type the answer,* **ii)** *type ... likewise upto xiv).*

PART-B: FILES MANAGEMENT-I

2. Type **ls -l** to find the files on long list format, and understand the information given. Then try with **ls -la**, and what is the difference with **ls -l** and **ls -la**
3. Type **cd** and **Enter**, create directory **ccgc**
4. Change to **ccgc** and then create the directores **ccgc5000, ccgc5001, ccgc5002, ccgc5003, ccgc5004, ccgc5050**
5. Rename the directory **ccgc5050** to **ccgc5005**
6. Type **cd** and **Enter**, Create two directories **labs** and **lesson** in **ccgc5000, ccgc5001, ccgc5002, ccgc5003, ccgc5004, ccgc5005** *(try to create the directories being in your home directory)*

prof benann nathan

LAB – 03 PRELAB

7. Type **cd** and **Enter**, now you should be in your home directory, create non-empty files as specified below in the respective directories. Each file should have their file name as text. *(try to create the directories being in your home directory)*
   a. Create files **lab1**, **lab2**, **lab3** in **ccgc5000/labs**, **ccgc5001/labs, ccgc5002/labs** and **ccgc5003/labs**
   b. Create files **module1**, **module2**, **module3**, **module4**, **module5** in **ccgc5000/lesson**, **ccgc5001/lesson, ccgc5002/lesson** and **ccgc5003/lesson**
8. Type **cd** and **Enter**, create a directory **backup** and copy directory **labs** and **lesson** of **ccgc5000 and ccgc5001** with its contents to the **backup** directory

Type **cd** and **Enter,** then take these **SCREENSHOTS a) tree ccgc b)tree backup c)ls -lR ccgc d) ls -lR backup**

PART-C: FILES MANAGEMENT-II

9. Type **cd** and **Enter,** Create directory **/cloud** and in cloud create three directories **aws**, **gcp**, **azure**
10. Create files **aws1**, **aws2** in **/cloud/aws**, **gcp1**, **gcp2** in **/cloud/gcp**.
    SCREENSHOTS a) tree /cloud b) ls -lR /cloud
11. Delete the directory **/cloud/aws** using **rmdir** command. if **rmdir** does not delete, ascertain the reason why ? and delete it using the right command
12. Delete the directory **/cloud/azure** using **rmdir** command. If it deletes ascertain the reason why ?
13. Type **cd** and **Enter**, then create a file **mylab3** using touch command. **SCREENSHOT: stat mylab3; ls -lR /cloud**
14. Using **cat** command add the name of the file as text in the file **mylab3**. **SCREENSHOT: stat mylab3**
15. Using **vim** command add another line "this is lab3" to **mylab3** file. **SCREENSHOT: stat mylab3**
16. Using **ls** command display various times of the file **mylab3 (SCREENSHOT)**

PART-D: LINKED FILES (Type **cd** and **Enter** - be in your home directory the following activities)

17. Create a softlink named **sl-mylab3** for the file **mylab3**
18. Create a hardlink file named **hl-mylab3** for the file **mylab3**
19. Create a softlink named **cloudsl** in root for the directory **/cloud**
20. Create a hardlink named **cloudhl** in root for the directory **/cloud**

SCREENSHOT: a) ls -li *mylab3* b)ls -li /cloud*

PART-E: SEARCH

21. Search the files that start with **ccgc** using **find** command starting from your home directory
22. Search all the files that starts with **lab** and **module** using **find** starting from your home directory.
23. Search all the files whose size is greater than 100MB from root
24. Search all files which has your username as owner or files created by your username, starting from root
25. Use locate to search file name with module1 (**SCREENSHOT history |grep -E 'find|locate'**)

==========

prof benann nathan