Lab 05

1. List the user commands and redirect the output to /tmp/commands.list

Ls /usr/bin > /tmp/commands.list

2. Count the number of user commands

Wc -l /tmp/commads.list

3. Get all the users names whose first character in their login is ‘g’.

Grep ^g /etc/passwd

4. Get the logins name and full names (comment) of logins starts with “g”.

Cut -f1,5 -d: /etc/passwd | grep ^g

5. Save the output of the last command sorted by their full names in a file.

Cut -f1,5 -d: /etc/passwd | grep ^g | sort -k5 -t: | tee newfile

Or

Cut -f1,5 -d: /etc/passwd | grep ^g | sort -k5 -t: >> newfile

6. Write two commands: first: to search for all files on the system that named .bash_profile.

Second: sorts the output of ls command on / recursively, Saving their output and error in 2 different files and sending them to the background.

First find / -name .bash_profile 2> errorfile

Second

Ls -R / 2> filename > filename3 & | sort

7. Display the number of users who is logged now to the system.

Who | cut -d " " -f1 | wc -l # inside the "" are a space (delimiter here is the space)

If you have two records for the same user you can use

Who | cut -d " " -f1 |uniq | wc -l

8. Display lines 7 to line 10 of /etc/passwd file

Head -n7 /etc/passwd | tail -n4

9. What happens if you execute:

cat filename1 | cat filename2 will display second file

ls | rm nothing will change

ls /etc/passwd | wc -l → 1

17. Display all processes except yours

Ps -e -f | grep -v ^noha

18. Use the pgrep command to list your processes only

Pgrep -l -u noha

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Lab 05

1. Compress a file by compress, gzip, zip commands and decompress it again. State the differences between compress and gzip commands.

Gzip f1 f2 f3 f4

Gunzip f1.gz f2.gz f3.gz

Zip will not work

2. What is the command used to view the content of a compressed file.

Zcat f1.gz

3. Backup /etc directory using tar utility.

Tar cvf myfile.tar /etc/

4. Starting from your home directory, find all files that were modified in the last two day.

find ~ -mtime -2

5. Starting from /etc, find files owned by root user.

$ find /etc -type f -a -user root

6. Find all directories in your home directory.

find ~ -type d

7. Write a command to search for all files on the system that, its name is ".profile".

find / -type f -a -name ".profile"

8. Identify the file types of the following: /etc/passwd, /dev/pts/0, /etc, /dev/sda

File /etc/passwd

9. List the inode numbers of /, /etc, /etc/hosts.

Ls -id /

Ls -id /etc

10. Copy /etc/passwd to your home directory, use the commands diff and cmp, and Edit in the file you copied, and then use these commands again, and check the output.

```
 cp /etc/passwd  ./
cmp /etc/passwd ./passwd
diff /etc/passwd ./passwd
vi ./passwd
cmp /etc/passwd ./passwd
diff /etc/passwd ./passwd
```

11. Create a symbolic link of /etc/passwd in /boot.

ln -s /etc/passwd /boot/passwd

12. Create a hard link of /etc/passwd in /boot. Could you? Why?

NO, because it's not allowed to create hard links across partitions