

Linux Assignment – 6

Name: Pranav H Raikar

Sec: CY(3b)

USN: ENG24CY0041

Roll No. : 39

1. Which **command** is used **to list the contents of a directory**? Justify with proper example.

Ans: To display every file and folder within a directory, use the ls command. It enables us to see what is kept in the present location.

Example: ls-a

2. Write the **command to create a new directory named 123test_dir**.

Ans: the command “ mkdir 123test_dir ” is used create a directory in the linux machine. To create a directory we use the mkdir command it means (make directory).

3. What is the purpose of the **sed** command? Justify with proper example.

Ans: it is mainly used for edit the text in the files automatically without opening the file in text editor other editing software to edit it can be edit directly.

Example: **sed 's/apple/orange/' fruits.txt.**

Here the first word apple with orange in each and every line in the file called fruits.txt

It also used to detect the text in the file by using some flag to this command.

4. Which **distinct command** is used to display one-line descriptions of any commands?

Ans: the command “ whatis ” will gives the one line explanation of the required command .

It is also similar to the “ Man ” command .

Example: whatis ls

Here the whatis command will show that what the ls command will do

ls (1) – list directory contents.

5. Write the command to **create** an empty file named “**notes.txt**”.

Ans: to create a blank or empty file we use the command name called “ touch” which only create a empty file with text. Editable.

Command “ touch notes.txt ”

Here the command will create a empty file name notes.

6. Differentiate between grep and awk commands with an example.

Ans:

The grip command is used to search text patterns in files. Where as awk command is used for pattern scanning and text processing means printing specific column.

Example :

“ **Grep “error “ log.text** ” here the command grep will search the error in the word in the log file so grep is for search the element from the specific file

“ awk ‘{print \$1}’ ” this command will do both searching and formatting .

7. Write the command to give read, write, and execute permission to the owner of a file script.sh

Ans:

We use the command name called “chmod” for changing the file permission .like write ,read,or execute permission.

Example: “ chmod u+rwx script.sh ” here the command will change the file permission like here it will change to read write and execute permission as the user request of the specific file called script.sh . Here in command r stand for read ,w stand for write and the x stands for the executable permission.

8. How is chown different from chgrp? Give one example for each.

Ans:

Here the chown will change the owner of the given file where as the chgrp will change the group of the specific file.

Example: “ **sudo chown user1 file.text** ” here the command chown which means change owner will change the file owner to user1 of the file name called file.txt

“ chgrp staff file.txt ” here the command will change the group file.txt to staff . It is used for changing the group.

9. A user complains that they **cannot execute a file** even though it exists in their directory. How would you troubleshoot this using **ls -l, chmod, and whoami**?

Ans:

First we have to check the files permission using the ls with l flag command

Ls -l filename

If the file is missing with the execute permission for the user then , we should check who the current user is running by the command whoami

Whoami

It will return the current user then we should give execute permission to the file using chmod command

“ Chmod u+x file name ”

It will enable the executing permission for the file.

10. Design a command pipeline to: find all .log files modified in the last 2 days in /var/log, display them on screen, and save the results into a file recent_logs.txt using tee command.

Ans:

we can write the command in one line “ find /var/log -name "*.log" -mtime -2 | tee recent_logs.txt ”

Here the find/var/log will look inside the directory from the log files

-name will filter the search results to show file that end with .log files

-mtime-2 this means modifies in the last 2 days

Pipe symbol is used for passes the output from the find command into the next command

Tee recent_log .txt the tee command for two things at nce the display output and second ot will save the out put in file which is given.