Using UNIX Basic Commands:

1. To display the current working directory, the command is:

   pwd

   The output is as follows. →

   [admin@hostname01 ~]$ pwd

   /home/admin

2. Display the path to and name of your HOME directory.

   → [admin@hostname01 ~]$ echo $HOME

   /home/admin

3. Display the login name using which you have logged into the system

   → admin@hostname01 ~]$ whoami

   admin

4. Display the hidden files of your current directory.

   → [admin@hostname01 ~]$ ls -a

   . .bash_logout .cache Documents .mozilla Public

   .. .bash_profile .config Downloads Music Templates

   .bash_history .bashrc Desktop .local Pictures Videos

5. List the names of all the files in your home directory.

   → [admin@hostname01 ~]$ ls $HOME

   Desktop Documents Downloads Music Pictures Public Templates Videos

6. Using the long listing format to display the files in your directory.

   → [admin@hostname01 ~]$ ls -l

total 0

drwxr-xr-x. 2 admin admin 6 Dec 24 19:53 Desktop

drwxr-xr-x. 2 admin admin 6 Aug 25 2022 Documents

drwxr-xr-x. 2 admin admin 50 Aug 25 2022 Downloads

drwxr-xr-x. 2 admin admin 6 Aug 25 2022 Music

drwxr-xr-x. 2 admin admin 6 Aug 25 2022 Pictures

drwxr-xr-x. 2 admin admin 6 Aug 25 2022 Public

drwxr-xr-x. 2 admin admin 6 Aug 25 2022 Templates

drwxr-xr-x. 2 admin admin 6 Aug 25 2022 Videos

7. List the files beginning with chap followed by any number or any lower case alphabet. (Example , it should display all files whose names are like chap1, chap2, chap3 ……., chapa,ahapb,chapc,……..)

   → [admin@hostname01 Desktop]$ ls | grep "^chap[0-9a-z]"

   chap2

   chapb

   chapd

   [admin@hos

8. Give appropriate command to create a directory called C_prog under your home directory. (Note: Check the directory using ls)

   [admin@hostname01 Desktop]$ mkdir ~/Cprog

9. Create the following directories under your home directory. (Note: Check using ls)

   newdir

   newdirectory

   ➔ [admin@hostname01 Desktop]$ mkdir ~/ newdir ~/ newdirectory

10. List the names of all the files, including the contents of the sub directories under your home directory.

→ [admin@hostname01 Desktop]$ ls -R ~

/home/admin:

Cprog Documents Music Public Videos

Desktop Downloads Pictures Templates

/home/admin/Cprog:

/home/admin/Desktop:

1chap 2chap chap chap2 chapb chapd newdir newdirectory

11. Remove the directory called newdirectory from your working directory.

→ [admin@hostname01 Desktop]$ rmdir ~/newdirectory

12. Create a directory called temp under your home directory.

→ [admin@hostname01 Desktop]$ mkdir ~/temp

[admin@hostname01 Desktop]$ ls

1chap 2chap chap chap2 chapb chapd newdir

13. Remove the directory called newdir under your home directory and verify the above with the help of the directory listing command.

→ [admin@hostname01 Desktop]$ rmdir ~/newdir (for empty use -r)

14. Create another directory directorynew under the temp directory.

→ [admin@hostname01 ~]$ mkdir ~/temp/directorynew

[admin@hostname01 ~]$ cd temp

[admin@hostname01 temp]$ ls

directorynew

15. Change the directory to your home directory.

→ [admin@hostname01 temp]$ cd ~

16. From your home directory, change the directory to directorynew using relative and absolute path.

Realative → [admin@hostname01 ~]$ cd temp/directorynew

[admin@hostname01 directorynew]$ cd ~

Absolute → [admin@hostname01 ~]$ cd ~/temp/directorynew

[admin@hostname01 directorynew]$

17. Remove the directory called c_prog, which is in your home directory.

→ [admin@hostname01 directorynew]$ rmdir ~/Cprog

18. Change to the directory /etc and display the files present in it.

→ [admin@hostname01 ~]$ cd /etc

[admin@hostname01 etc]$ ls

accountsservice gshadow popt.d

adjtime gshadow- printcap

aliases gss profile

alsa host.conf profile.d

alternatives hostname protocols

anacrontab hosts pulse

appstream.conf hp qemu-ga

asound.conf inittab ras

19. List the names of all the files that begin with a dot in the /usr/bin directory.

→ [root@hostname01 ~]# ls -a /usr/bin | grep "^\."

20. Create a file first.unix with the following contents.

Hi! Good Morning everybody.

Welcome to the First exercise on UNIX.

Hope you enjoy doing the assignments.

→ [admin@hostname01 ~]$ echo -e “Hi! Good Morning everybody. \n\n

Welcome to the First exercise on UNIX. \n\n

Hope you enjoy doing the assignments. ” > first.unix

21. Copy the file first.unix in your home directory to first.unics.

(Note: checked using ls, first.unix file also should exist along with first.unics)

→[admin@hostname01 ~]$ cp ~/first.unix ~/first.unics

22. List the contents of first.unix and first.unics with a single command.

→ [admin@hostname01 ~]$ cat first.unix first.unics

23. Create a new directory under the temp directory.

→ [admin@hostname01 ~]$ mkdir ~/temp/sub

24. From your home directory, copy all the files to the directory created under the

temp sub directory.

→[admin@hostname01 temp]$ cp -r ~/temp/* ~/styles/

[admin@hostname01 temp]$ ls ~/styles

directorynew sub

25. Move the file first.unix to the directory temp as second.unix

→ [admin@hostname01 temp]$ mv ~/first.unix ~/temp/second.unix

26. Remove the file called first.unics from the home directory.

→ admin@hostname01 temp]$ rm ~/first.unics

27. Change your directory to temp and issue the command rm *. What do you observe?

→ [admin@hostname01 ~]$ cd temp

[admin@hostname01 temp]$ rm *

Remove all files in the temp but not subdirectories

28. Move all files whose names end with a, c and o to the HOME directory.

→ {admin@hostname01 temp]$ mv ~/temp/*[aco] ~/

29. Copy all files that end with a 'UNIX' to the temp directory.

→ [admin@hostname01 temp]$ cp *UNIX ~/temp/

30. Issuing a single command, remove all the files from the directory temp and the

directory itself.

→ [admin@hostname01 ~]$ rm -r temp

[admin@hostname01 ~]$ ls

Desktop Downloads Music Public Styles Videos

Documents firsst.unix Pictures styles Templates

31. Try commands cp and mv with invalid number of arguments and note the results.

→ cp will give missing destination file and same for mv

32. Use the cat command to create a file friends, with the following data:

Madhu	6966456	09/07/68
Jamil	2345215	08/09/67
Ajay	5546785	01/04/66
Mano	7820022	09/07/68
David	8281292	09/09/60
Simmi	7864563	12/12/70
Navin	2224311	30/05/68

The fields should be separated by a tab.

→ [admin@hostname01 ~]$ cat > friends << EOF

Madhu	6966456	09/07/68
Jamil	2345215	08/09/67
Ajay	5546785	01/04/66
Mano	7820022	09/07/68
David	8281292	09/09/60

Simmi 7864563 12/12/70

Navin 2224311 30/05/68

EOF

[admin@hostname01 ~] $ cat friends

33. Display contents of the file friends.

→ [admin@hostname01 ~] $ cat friends

Madhu 6966456 09/07/68

Jamil 2345215 08/09/67

Ajay 5546785 01/04/66

Mano 7820022 09/07/68

David 8281292 09/09/60

Simmi 7864563 12/12/70

Navin 2224311 30/05/68

34. Copy contents of friends to newfriend without using the cp command.

→ admin@hostname01 ~]$ cat friends > newfriend

35. Display contents of the file friends and newfriends in a single command.

→ [admin@hostname01 ~]$ cat friends newfriends

36. Find all users currently working on the system and store the output in a file named as users.

è → [admin@hostname01 ~]$ who users

37. Append contents of friends file to the file, users.

→ [admin@hostname01 ~]$ cat friends >> users

38. Display current system date and time and record your observations. How is the

time displayed?

è → [admin@hostname01 ~]$ date

Fri Jan 10 11:15:45 PM IST 2025

[admin@hostname01 ~]$

39. Display calendar for the month and year of your birth.

→ [admin@hostname01 ~]$ cal 01 2025

January 2025

Su Mo Tu We Th Fr Sa

1 2 3 4

5 6 7 8 9 10 11

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30 31

40. Try following commands and record your observations.

date "+ %" → invalid format

date "+%m" → 01

date "+%D" →01/09/2025

date "+%/%Training Activity" →invalid format

date "+%Training Activity" →invalid format

date "+%r" →11:45:51 AM

Using Pipes and Filters:

1: Redirect the content of the help document ls, into a file called as lsdoc.

➔ [root@hostname01 ~]# ls --help > lsdoc
➔ Cat lsdoc

2: Display the content of the lsdoc page wise.

➔ [root@hostname01 ~]# more lsdoc

3: Create a file data.txt using input redirection.

→ [root@hostname01 ~]# cat > data.txt

4: Display data.txt.

→ [root@hostname01 ~]# cat data.txt

5: Remove the file data.txt.

→ [root@hostname01 ~]# rm data.txt

6: Use error redirection to display data.txt, if any error stores it in errorlog.txt

➔ root@hostname01 ~]# cat data.txt2 > errorlog.txt

7: Display errorlog file.

→ root@hostname01 ~]# cat errorlog.txt