**Using UNIX Basic Commands:**

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

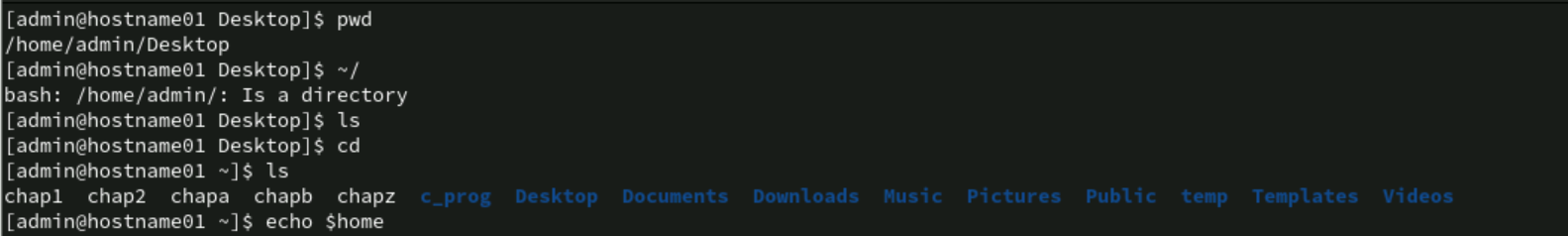
pwd

The output is as follows.

/home/trg1

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

Command used: pwd and ls



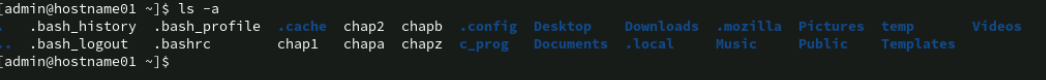
3. Display the login name using which you have logged into the system

Command used is->whoami

Output->admin

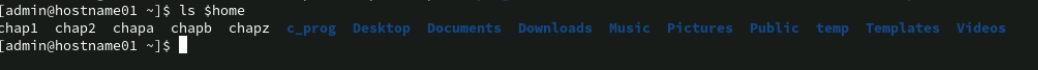


4. Display the hidden files of your current directory.

Commandused->ls-a

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

Command used-> ls $HOME



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

Command used->ls -l

admin@hostname01 ~]$ ls -l

total 0

-rw-r--r--. 1 admin admin 0 Jan 9 20:09 chap1

-rw-r--r--. 1 admin admin 0 Jan 9 20:09 chap2

-rw-r--r--. 1 admin admin 0 Jan 9 20:09 chapa

-rw-r--r--. 1 admin admin 0 Jan 9 20:09 chapb

-rw-r--r--. 1 admin admin 0 Jan 9 20:09 chapz

drwxr-xr-x. 2 admin admin 6 Jan 9 20:13 c\_prog

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. 3 admin admin 26 Jan 10 22:00 temp

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,……..)

Command used🡪

[admin@hostname01 ~]$ ls chap[0-9a-z]

chap1 chap2 chapa chapb chapz

8. Give appropriate command to create a directory called C\_prog under your home

directory. (Note: Check the directory using ls )



Command used: mkdir ~/c\_prog ls ~l ls ~/c\_prog

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

newdir

newdirectory

command used: mkdir ~/newdir ~/newdirectory

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

[admin@hostname01 ~]$ ls

chap1 chapa chapz Desktop Downloads newdir Pictures temp Videos

chap2 chapb c\_prog Documents Music newdirectory Public Templates

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

your home directory.

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

[admin@hostname01 ~]$ ls

chap1 chapa chapz Desktop Downloads newdir Pictures temp Videos

chap2 chapb c\_prog Documents Music newdirectory Public Templates

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

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

[admin@hostname01 ~]$ ls

chap1 chapa chapz Desktop Downloads newdir Pictures temp Videos

chap2 chapb c\_prog Documents Music newdirectory Public Templates

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

[admin@hostname01 ~]$ ~/temp

OR

[admin@hostname01 ~]$ mkdir temp

13. Remove the directory called newdir under your home directory and verify the

above with the help of the directory listing command.

[admin@hostname01 ~]$ rm -r ~/newdir

[admin@hostname01 ~]$ ls

chap1 chap2 chapa chapb chapz c\_prog Desktop Documents Downloads Music Pictures Public temp Templates Videos

14. Create another directory directorynew under the temp directory.

Commands used 🡪 Two ways to this 🡪

1. mkdir ~/temp/directorynew
2. Go to temp and then make directory into it i.e [admin@hostname01 temo]$ mkdir directorynew

15. Change the directory to your home directory.

Commands used🡪2 ways to do this

[admin@hostname01 ~]$ cd

[admin@hostname01 ~]$ pwd

/home/admin

[admin@hostname01 ~]$ cd

[admin@hostname01 ~]$ pwd

/home/admin

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

absolute path.

Commands used🡪1.Absolute path

[admin@hostname01 directorynew]$ cd ..

[admin@hostname01 temp]$ cd ..

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

[admin@hostname01 directorynew]$

2.Relative path

[admin@hostname01 directorynew]$ cd ..

[admin@hostname01 temp]$ cd ..

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

[admin@hostname01 directorynew]$

17. Remove the directory called c\_prog, which is in your home directory.

Commands used🡪

[admin@hostname01 directorynew]$ rm -r ~/c\_prog

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

Commands used🡪

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Description automatically generated

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

admin@hostname01 /]$ ls -d /usr/bin/.\*

/usr/bin/. /usr/bin/..

[admin@hostname01 /]$ ^C

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.

Commands used🡪

admin@hostname01 /]$ cat > ~/first.unix << EOF

> Hi good morning everybody

> Welcome to first exercise of unix

> Hope you enjoy doing assignments

> EOF

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 /]$ cp ~/first.unix ~/first.unics

[admin@hostname01 /]$ ls ~

chap1 chapa chapz Documents first.unics Music Public Templates

chap2 chapb Desktop Downloads first.unix Pictures temp Videos

23. Create a new directory under the temp directory.

Commands used🡪

[admin@hostname01 /]$ mkdir ~/temp/newdir

[admin@hostname01 /]$ ls

afs bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var

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

temp sub directory.

[admin@hostname01 /]$ cp ~/\* ~/temp/newdir

cp: -r not specified; omitting directory '/home/admin/Desktop'

cp: -r not specified; omitting directory '/home/admin/Documents'

cp: -r not specified; omitting directory '/home/admin/Downloads'

cp: -r not specified; omitting directory '/home/admin/Music'

cp: -r not specified; omitting directory '/home/admin/Pictures'

cp: -r not specified; omitting directory '/home/admin/Public'

cp: -r not specified; omitting directory '/home/admin/temp'

cp: -r not specified; omitting directory '/home/admin/Templates'

cp: -r not specified; omitting directory '/home/admin/Videos'

[admin@hostname01 /]$ ls ~/temp/newdir

chap1 chap2 chapa chapb chapz first.unics first.unix

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

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

[admin@hostname01 /]$ ls ~/temp

directorynew newdir second.unix

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

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

[admin@hostname01 /]$ ls ~/temp

directorynew newdir second.unix

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

[admin@hostname01 /]$ cd ~/temp

[admin@hostname01 temp]$ rm \*

rm: cannot remove 'directorynew': Is a directory

rm: cannot remove 'newdir': Is a directory

Observation -🡪this only removes files ,cannot remove the directories

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

[admin@hostname01 temp]$ echo ~/temp/\*[aco]

/home/admin/temp/\*[aco]

[admin@hostname01 temp]$ touch ~/temp/filea ~/temp/fileb ~/temp/filec ~/temp/fileo

[admin@hostname01 temp]$ touch ~/temp/filea ~/temp/fileb ~/temp/filec ~/temp/fileo`

> ls

>

bash: unexpected EOF while looking for matching ``'

bash: syntax error: unexpected end of file

[admin@hostname01 temp]$ ls ~

chap1 chapa chapz Documents Music Public Templates

chap2 chapb Desktop Downloads Pictures temp Videos

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

[admin@hostname01 temp]$ ls ~

chap1 chapa chapz Documents filea fileo Pictures temp Videos

chap2 chapb Desktop Downloads filec Music Public Templates

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

[admin@hostname01 ~]$ touch ~/fileUNIX ~/exampleUNIX

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

cp: cannot stat '/home/admin/UNIX': No such file or directory

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

[admin@hostname01 ~]$ ls ~/temp

directorynew exampleUNIX fileb fileUNIX newdir

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

directory itself.

Commands used🡪 rm -r ~/temp

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

Observation🡪output usage instructions for the commands due to invalid arguements

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

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.

Commands used🡪

Cat ~/friends > ~/newfriend

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

[admin@hostname01 ~]$ cat ~/friends > ~/newfriend

[admin@hostname01 ~]$ cat ~/friends ~/newfriend

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

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

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

as users.

Commands used🡪 [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?

[admin@hostname01 ~]$ date

Sat Jan 11 07:46:48 PM IST 2025

[admin@hostname01 ~]$

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

Command used: cal 09 2002

A screenshot of a computer

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40. Try following commands and record your observations.

date “+ %” ->%

date “+%m” ->01

date “+%D” ->01/09/25

date “+%/%Training Activity” 🡪%/20:25:05raining Activity

date “+%Training Activity” -> % Training Activity

date “+%r”-> 08:28:09 PM

Using Pipes and Filters:

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

Commands used🡪

[admin@hostname01 ~]$ ls --help > lsdoc

2: Display the content of the lsdoc page wise.

Commands used🡪less lsdoc (less is used to display the commands line by line)

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

admin@hostname01 ~]$ cat > data.txt

Hello this is sakshi

learning unix is fun

4: Display data.txt.

admin@hostname01 ~]$ cat data.txt

Hello this is sakshi

learning unix is fun

5: Remove the file data.txt.

Command used🡪rm data.txt

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

Command used 🡪

[admin@hostname01 ~]$ cat data.txt 2> errorlog.txt

7: Display errorlog file.

admin@hostname01 ~]$ cat errorlog.txt

cat: data.txt: No such file or directory