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.

   ➤ [admin@hostname01 ~]$ pwd

      /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_profile Desktop   .mozilla Templates
      ..   .bashrc   Documents Music   Videos
      .bash_history .cache   Downloads Pictures
      .bash_logout .config   .local   Public

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

   ➤ [admin@hostname01 ~]$ ls $HOME

   Desktop   Downloads Pictures Templates

   Documents Music   Public   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 ~]$ ls| grep "^Chap"

Chap0a

8. Give appropriate command to create a directory called C_prog under your home

directory. (Note: Check the directory using ls)

> [admin@hostname01 ~]$ mkdir $HOME/C_prog
> [admin@hostname01 ~]$ ls

chap0a C_prog Documents Music   Public   Videos

Chap0a Desktop Downloads Pictures Templates

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

newdir

newdirectory

> [admin@hostname01 ~]$ mkdir $HOME/newdir
> [admin@hostname01 ~]$ mkdir $HOME/newdirectory
> [admin@hostname01 ~]$ ls $HOME

chap0a C_prog Documents Music newdirectory Public   Videos

Chap0a Desktop Downloads newdir Pictures   Templates

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

> [admin@hostname01 ~]$ ls -R $HOME

/home/admin:

chap0a C_prog Documents Music newdirectory Public Videos

Chap0a Desktop Downloads newdir Pictures Templates

/home/admin/chap0a:

/home/admin/C_prog:

/home/admin/Desktop:

/home/admin/Documents:

/home/admin/Downloads:

photo-1603366615917-1fa6dad5c4fa.jpg

/home/admin/Music:

/home/admin/newdir:

/home/admin/newdirectory:

/home/admin/Pictures:

/home/admin/Public:

/home/admin/Templates:

/home/admin/Videos:

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

> [admin@hostname01 ~]$ ls

chap0a C_prog Documents Music newdirectory Public Videos

Chap0a Desktop Downloads newdir Pictures Templates

[admin@hostname01 ~]$ rmdir newdirectory

[admin@hostname01 ~]$ ls

chap0a C_prog Documents Music Pictures Templates

Chap0a Desktop Downloads newdir Public Videos

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

> [admin@hostname01 ~]$ mkdir $HOME/temp

  [admin@hostname01 ~]$ ls

  chap0a C_prog Documents Music Pictures temp   Videos

  Chap0a Desktop Downloads newdir Public   Templates

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

> [admin@hostname01 ~]$ rmdir $HOME/newdir

  [admin@hostname01 ~]$ ls -l $HOME

  total 0

  drwxr-xr-x. 2 admin admin 6 Jan 9 20:37 chap0a

  -rw-r--r--. 1 admin admin 0 Jan 9 20:43 Chap0a

  drwxr-xr-x. 2 admin admin 6 Jan 9 20:48 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. 2 admin admin 6 Jan 9 22:27 temp

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

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

14. Create another directory directorynew under the temp directory.

> [admin@hostname01 ~]$ mkdir $HOME/temp/directorynew

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

  directorynew

15. Change the directory to your home directory.

> [admin@hostname01 ~]$ cd $HOME

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

   absolute path.

> [admin@hostname01 ~]$ cd temp/directorynew
> [admin@hostname01 directorynew]$ cd $HOME/temp/directorynew
> [admin@hostname01 directorynew]$ pwd

   /home/admin/temp/directorynew

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

> [admin@hostname01 directorynew]$ rmdir $HOME/C_prog

   [admin@hostname01 directorynew]$ ls $HOME

   chap0a Desktop   Downloads Pictures temp   Videos

   Chap0a Documents Music   Public   Templates

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

> [admin@hostname01 directorynew]$ 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

   at.deny   inputrc   rc.d

   audit   iproute2   rc.local

authselect	iscsi	redhat-release
avahi	issue	request-key.conf
bash_completion.d	issue.d	request-key.d
bashrc	issue.net	resolv.conf
bindresvport.blacklist	kdump	rpc
binfmt.d	kdump.conf	rpm
bluetooth	kernel	rsyncd.conf
brlapi.key	keys	rsyslog.conf
brltty	keyutils	rsyslog.d
brltty.conf	krb5.conf	rwtab.d
centos-release	krb5.conf.d	samba
chromium	ld.so.cache	sane.d
chrony.conf	ld.so.conf	sasl2

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

  ➢ [admin@hostname01 etc]$ 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 "Hi! Good Morning everybody.
    Welcome to the First exercise on UNIX.
    Hope you enjoy doing the assignments. " > first.unix
  ➢ [admin@hostname01 ~]$ cat first.unix
    Hi! Good Morning everybody.
    Welcome to the First exercise on UNIX.
    Hope you enjoy doing the assignments.

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 $HOME/first.unix $HOME/first.unics
> [admin@hostname01 ~]$ ls -l $HOME

total 8

drwxr-xr-x. 2 admin admin   6 Jan 9 20:37 chap0a

-rw-r--r--. 1 admin admin   0 Jan 9 20:43 Chap0a

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

-rw-r--r--. 1 admin admin 105 Jan 10 20:07 first.unics

-rw-r--r--. 1 admin admin 105 Jan 10 19:58 first.unix

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 9 22:32 temp

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

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

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

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

Hi! Good Morning everybody.

Welcome to the First exercise on UNIX.

Hope you enjoy doing the assignments.

Hi! Good Morning everybody.

Welcome to the First exercise on UNIX.

Hope you enjoy doing the assignments.

23. Create a new directory under the temp directory.

   ➤ [admin@hostname01 ~]$ mkdir $HOME/temp/new_dir

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

   ➤ [admin@hostname01 ~]$ cp -r $HOME/temp/new_dir .
   ➤ [admin@hostname01 ~]$ cd $HOME/new_dir
   ➤ [admin@hostname01 new_dir]$ ls
     chap0a Desktop Downloads first.unix new_dir Public Templates
     Chap0a Documents first.unics Music   Pictures temp   Videos

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

   ➤ [admin@hostname01 new_dir]$ mv $HOME/first.unix $HOME/temp/second.unix

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

   ➤ [admin@hostname01 ~]$ rm $HOME/first.unics

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

   ➤ [admin@hostname01 ~]$ cd $HOME/temp
   ➤ [admin@hostname01 temp]$ rm *

     rm: cannot remove 'directorynew': Is a directory

     rm: cannot remove 'new_dir': Is a directory

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

   ➤ [admin@hostname01 ~]$ mv *[aco] $HOME

     mv: 'chap0a' and '/home/admin/chap0a' are the same file

     mv: 'Chap0a' and '/home/admin/Chap0a' are the same file

     mv: 'Music' and '/home/admin/Music' are the same file

     mv: 'Public' and '/home/admin/Public' are the same file

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

   ➢ [admin@hostname01 temp]$ cp '*UNIX' $HOME/temp

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

   ➢ [admin@hostname01 ~]$ rm -rf $HOME/temp

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

   ➢ [admin@hostname01 ~]$ cp first.txt

      cp: missing destination file operand after 'first.txt'

      Try 'cp --help' for more information.

   ➢ [admin@hostname01 ~]$ mv file1

      mv: missing destination file operand after 'file1'

      Try 'mv --help' for more information.

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

> ^[[200~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

~EOF
```

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 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

~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

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

> [admin@hostname01 ~]$ who > users
> [admin@hostname01 ~]$ cat users

admin   seat0   2025-01-09 19:00 (login screen)

admin   tty2   2025-01-09 19:00 (tty2)

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

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

admin   seat0   2025-01-09 19:00 (login screen)

admin   tty2   2025-01-09 19:00 (tty2)

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

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

> [admin@hostname01 ~]$ date

Fri Jan 10 11:12:43 PM IST 2025

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

```
[admin@hostname01 ~]$ cal 30 1 2002
      January 2002
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 "+%m"

> [admin@hostname01 ~]$ date "+%m"

Output: 01

date "+%D"

> [admin@hostname01 ~]$ date "+%D"

Output: 01/10/25

date "+%/%Training Activity"

> [admin@hostname01 ~]$ date "+%/%Training Activity"

Output: %/23:35:45raining Activity

date "+%Training Activity"

> [admin@hostname01 ~]$ date "+%Training Activity"

Output: 23:37:12raining Activity

date "+%r"

> [admin@hostname01 ~]$ date "+%r"

Output: 11:38:31 PM

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

- ➤ [admin@hostname01 ~]$ man ls | col -b > lsdoc

2: Display the content of the lsdoc page wise.

- ➤ [admin@hostname01 ~]$ less lsdoc

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

- ➤ [admin@hostname01 ~]$ cat > data.txt

4: Display data.txt.

- ➤ [admin@hostname01 ~]$ cat data.txt

5: Remove the file data.txt.

- ➤ [admin@hostname01 ~]$ rm data.txt

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

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

7: Display errorlog file.

- ➤ [admin@hostname01 ~]$ cat errorlog.txt