Vaishnavi Kuldharme

Using UNIX Basic Commands:

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

   pwd

   The output is as follows.

   [admin@hostname01 Desktop]$ su -

Password:

[root@hostname01 ~]# pwd

/root

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

   [root@hostname01 ~]# echo $HOME

/root

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

   [root@hostname01 ~]# echo $USER

root

[root@hostname01 ~]# whoami

root

4. Display the hidden files of your current directory.

[root@hostname01 ~]# ls -a

. anaconda-ks.cfg .bash_logout .bashrc .config Desktop Downloads Music   Public .tcshrc Videos .xauthZX5NEe

.. .bash_history .bash_profile .cache .cshrc Documents .local   Pictures .ssh Templates .viminfo

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

[root@hostname01 ~]# ls $HOME

anaconda-ks.cfg Desktop Documents Downloads Music Pictures Public Templates Videos

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

[root@hostname01 ~]# ls -l

total 4

-rw-------. 1 root root 828 Aug 25 2022 anaconda-ks.cfg

drwxr-xr-x. 2 root root   6 Aug 25 2022 Desktop

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

drwxr-xr-x. 2 root root   6 Aug 25 2022 Downloads

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

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

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

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

drwxr-xr-x. 2 root root   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,……..)

[root@hostname01 ~]# touch chap1 chap2 chapc chapD emp1 emp2

[root@hostname01 ~]# ls

anaconda-ks.cfg chap1 chap2 chapc chapD Desktop Documents Downloads emp1 emp2 Music Pictures Public Templates Videos

[root@hostname01 ~]# ls chap[0-9a-z]*

chap1 chap2 chapc

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

[root@hostname01 ~]# mkdir ~/C_prog

[root@hostname01 ~]# ls

anaconda-ks.cfg chapc C_prog   Downloads Music   Templates

chap1   chapD Desktop   emp1   Pictures Videos

chap2   C_k   Documents emp2   Public

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

   newdir

   newdirectory

[root@hostname01 ~]# cd ~

[root@hostname01 ~]# mkdir -p newdir newdirectory

[root@hostname01 ~]# ls

anaconda-ks.cfg chapc C_prog   Downloads Music   Pictures Videos

chap1   chapD Desktop   emp1   newdir   Public

chap2   C_k   Documents emp2   newdirectory Templates

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

   your home directory.

[root@hostname01 ~]# ls -R ~

/root:

anaconda-ks.cfg chapc C_prog   Downloads Music   Pictures Videos

chap1   chapD Desktop   emp1   newdir   Public

chap2   C_k   Documents emp2   newdirectory Templates

/root/C_k:

/root/C_prog:

/root/Desktop:

/root/Documents:

/root/Downloads:

/root/Music:

/root/newdir:

/root/newdirectory:

/root/Pictures:

/root/Public:

/root/Templates:

/root/Videos:

```
[root@hostname01 ~]# tree
.
├── anaconda-ks.cfg
├── chap1
├── chap2
├── chapc
├── chapD
├── C_k
├── C_prog
├── Desktop
├── Documents
├── Downloads
├── emp1
```

```
├── emp2
├── Music
├── newdir
├── newdirectory
├── Pictures
├── Public
├── Templates
└── Videos
```

12 directories, 7 files

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

[root@hostname01 ~]# rmdir newdirectory

[root@hostname01 ~]# ls

anaconda-ks.cfg chapc C_prog   Downloads Music   Public

chap1   chapD Desktop emp1   newdir   Templates

chap2   C_k   Documents emp2   Pictures Videos

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

[root@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.

[root@hostname01 ~]# rmdir newdir

[root@hostname01 ~]# ls

anaconda-ks.cfg chapc C_prog   Downloads Music   temp

chap1   chapD Desktop emp1   Pictures Templates

chap2   C_k   Documents emp2   Public   Videos

14. Create another directory directorynew under the temp directory.

[root@hostname01 ~]# mkdir ~/temp/directorynew

[root@hostname01 ~]# ls ~/temp

directorynew

15. Change the directory to your home directory.

[root@hostname01 ~]# cd ~

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

   absolute path.

[root@hostname01 ~]# cd temp/directorynew

[root@hostname01 directorynew]# cd ..

[root@hostname01 temp]# cd ..

[root@hostname01 ~]# cd root/temp/directorynew

-bash: cd: root/temp/directorynew: No such file or directory

[root@hostname01 ~]# cd /root/temp/directorynew

[root@hostname01 directorynew]# cd ..

[root@hostname01 temp]# cd ..

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

[root@hostname01 ~]# rmdir C_prog

[root@hostname01 ~]# ls

anaconda-ks.cfg chap1 chap2 chapc chapD C_k Desktop Documents Downloads emp1 emp2 Music Pictures Public temp Templates Videos

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

[root@hostname01 ~]# cd /etc

[root@hostname01 etc]# ls

accountsservice   crypto-policies   gcrypt   libaudit.conf   nftables   resolv.conf   sysconfig

adjtime   crypttab   gdm   libblockdev   nsswitch.conf   rpc   sysctl.conf

aliases   csh.cshrc   geoclue   libibverbs.d   nsswitch.conf.bak rpm   sysctl.d

alsa   csh.login   glvnd   libnl   nvme   rsyncd.conf   systemd

alternatives   cups   gnupg   libpaper.d   openldap   rsyslog.conf   system-release

anacrontab   cupshelpers   GREP_COLORS libreport   opt   rsyslog.d   system-release-cpe

appstream.conf   dbus-1   groff   libssh   os-release   rwtab.d   terminfo

asound.conf   dconf   group   libuser.conf   ostree   samba   tmpfiles.d

at.deny   debuginfod   group-   locale.conf   PackageKit   sane.d   tpm2-tss

audit   default   grub2.cfg   localtime   pam.d   sasl2   trusted-key.key

authselect   depmod.d   grub.d   login.defs   papersize   security   tuned

avahi   dhcp   gshadow   logrotate.conf   passwd   selinux   udev

bash_completion.d   DIR_COLORS   gshadow-   logrotate.d   passwd-   services   udisks2

bashrc   DIR_COLORS.lightbgcolor gss   lsm   pbm2ppa.conf   sestatus.conf   updatedb.conf

bindresvport.blacklist dnf   host.conf   lvm   pinforc   setroubleshoot   UPower

binfmt.d   dnsmasq.conf   hostname   machine-id   pkcs11   sgml   usb_modeswitch.conf

bluetooth   dnsmasq.d   hosts   machine-info   pkgconfig   shadow   vconsole.conf

brlapi.key   dracut.conf   hp   magic   pki   shadow-   vimrc

brltty   dracut.conf.d   inittab   mailcap   plymouth   shells   virc

brltty.conf   egl   inputrc   makedumpfile.conf.sample pm   skel   vmware-tools

centos-release	enscript.cfg	iproute2	man_db.conf	pnm2ppa.conf		
smartmontools	vulkan					
chromium	environment	iscsi	mcelog	polkit-1	sos	wgetrc
chrony.conf	ethertypes	issue	microcode_ctl	popt.d	speech-dispatcher	
wireplumber						
chrony.keys	exports	issue.d	mime.types	printcap	ssh	
wpa_supplicant						
cifs-utils	favicon.png	issue.net	mke2fs.conf	profile	ssl	X11
cni	filesystems	kdump	modprobe.d	profile.d	sssd	xattr.conf
cockpit	firefox	kdump.conf	modules-load.d	protocols	statetab.d	xdg
containers	firewalld	kernel	motd	pulse	subgid	xml
cron.d	flatpak	keys	motd.d	qemu-ga	subgid-	yum
cron.daily	fonts	keyutils	mtab	ras	subuid	yum.conf
cron.deny	foomatic	krb5.conf	multipath	rc.d	subuid-	
yum.repos.d						
cron.hourly	fprintd.conf	krb5.conf.d	nanorc	rc.local	sudo.conf	
cron.monthly	fstab	ld.so.cache	netconfig	redhat-release	sudoers	
crontab	fuse.conf	ld.so.conf	NetworkManager	request-key.conf	sudoers.d	
cron.weekly	fwupd	ld.so.conf.d	networks	request-key.d	sudo-ldap.conf	

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

[root@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.

[root@hostname01 etc]# echo -e" Hi! Good Morning everybody.\nWelcome to First exercise on unix.\nHope you enjoy doing assignments.">first.unix

[root@hostname01 etc]# cat first.unix

-e Hi! Good Morning everybody.\nWelcome to First exercise on unix.\nHope you enjoy doing assignments.

[root@hostname01 etc]# echo -e "Hi! Good Morning everybody.\nWelcome to First exercise on unix.\nHope you enjoy doing assignments." > first.unix

[root@hostname01 etc]# cat first.unix

Hi! Good Morning everybody.

Welcome to First exercise on unix.

Hope you enjoy doing assignments.

[root@hostname01 etc]# ccd ..

bash: ccd: command not found...

Similar command is: 'cd'

[root@hostname01 etc]# cd ..

[root@hostname01 /]# cd ~

[root@hostname01 ~]# ls

anaconda-ks.cfg chap1 chap2 chapc chapD C_k Desktop Documents Downloads emp1 emp2 Music Pictures Public temp Templates Videos

[root@hostname01 ~]# echo -e "Hi! Good Morning everybody.\nWelcome to First exercise on unix.\nHope you enjoy doing assignments." > first.unix

[root@hostname01 ~]# cat first.unix

Hi! Good Morning everybody.

Welcome to First exercise on unix.

Hope you enjoy doing 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)

[root@hostname01 ~]# cp ~/ first.unix ~/first.unics

cp: target '/root/first.unics' is not a directory

[root@hostname01 ~]# ls

anaconda-ks.cfg chap2 chapD Desktop   Downloads emp2   Music   Public Templates

chap1   chapc C_k   Documents emp1   first.unix Pictures temp   Videos

[root@hostname01 ~]# cp ~/ first.unix ~/first.unics

cp: target '/root/first.unics' is not a directory

[root@hostname01 ~]# cp ~/first.unix ~/first.unics

[root@hostname01 ~]# ls

anaconda-ks.cfg chap2 chapD Desktop   Downloads emp2   first.unix Pictures temp   Videos

chap1   chapc C_k   Documents emp1   first.unics Music   Public   Templates

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

[root@hostname01 ~]# cat first.unix first.unics

Hi! Good Morning everybody.

Welcome to First exercise on unix.

Hope you enjoy doing assignments.

Hi! Good Morning everybody.

Welcome to First exercise on unix.

Hope you enjoy doing assignments.

23. Create a new directory under the temp directory.

[root@hostname01 ~]# mkdir temp/newdire

[root@hostname01 ~]# ls

anaconda-ks.cfg chap2 chapD Desktop   Downloads emp2   first.unix Pictures temp   Videos

chap1   chapc C_k   Documents emp1   first.unics Music   Public   Templates

[root@hostname01 ~]# ls temp

directorynew newdire

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

[root@hostname01 ~]# cp ~/* temp/newdire

cp: overwrite 'temp/newdire/anaconda-ks.cfg'? n

cp: overwrite 'temp/newdire/chap1'? n

cp: overwrite 'temp/newdire/chap2'? cp: overwrite 'temp/newdire/chapc'? cp: overwrite 'temp/newdire/chapD'? cp: -r not specified; omitting directory '/root/C_k'

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

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

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

cp: overwrite 'temp/newdire/emp1'? cp: overwrite 'temp/newdire/emp2'? cp: overwrite 'temp/newdire/first.unics'? cp: overwrite 'temp/newdire/first.unix'? cp: -r not specified; omitting directory '/root/Music'

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

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

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

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

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

[root@hostname01 ~]# cd temp

[root@hostname01 temp]# ls

directorynew newdire

[root@hostname01 temp]# cd directorynew

[root@hostname01 directorynew]# ls

[root@hostname01 directorynew]# cd ..

[root@hostname01 temp]# cd newdire

[root@hostname01 newdire]# ls

anaconda-ks.cfg chap1 chap2 chapc chapD emp1 emp2 first.unics first.unix

[root@hostname01 newdire]# cd ~

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

[root@hostname01 ~]# mv ~/first.unix temp/second.unix

[root@hostname01 ~]# ls temp

directorynew newdire second.unix

[root@hostname01 ~]# cat temp/second.unix

Hi! Good Morning everybody.

Welcome to First exercise on unix.

Hope you enjoy doing assignments.

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

[root@hostname01 ~]# rm first.unix

rm: cannot remove 'first.unix': No such file or directory

[root@hostname01 ~]# ls

anaconda-ks.cfg chap2 chapD Desktop   Downloads emp2   Music   Public Templates

chap1   chapc C_k Documents emp1   first.unics Pictures temp   Videos

[root@hostname01 ~]# rm first.unics

rm: remove regular file 'first.unics'? y

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

[root@hostname01 ~]# cd temp

[root@hostname01 temp]# rm*

bash: rm*: command not found...

[root@hostname01 temp]# rm*.

bash: rm*.: command not found...

[root@hostname01 temp]# rm *

rm: cannot remove 'directorynew': Is a directory

rm: cannot remove 'newdire': Is a directory

rm: remove regular file 'second.unix'? n

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

[root@hostname01 temp]# mv *[aco] ~/

mv: cannot stat '*[aco]': No such file or directory

[root@hostname01 temp]# ls

directorynew newdire second.unix

[root@hostname01 temp]# cd ~

[root@hostname01 ~]# mv *[aco] ~/

mv: 'chapc' and '/root/chapc' are the same file

mv: 'Music' and '/root/Music' are the same file

mv: 'Public' and '/root/Public' are the same file

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

[root@hostname01 ~]# cp *UNIX ~/temp/

cp: cannot stat '*UNIX': No such file or directory

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

[root@hostname01 ~]# rm -r ~/temp

rm: descend into directory '/root/temp'? y

rm: descend into directory '/root/temp/newdire'? y

rm: remove regular empty file '/root/temp/newdire/chapD'? y

rm: remove regular empty file '/root/temp/newdire/emp1'? y

rm: remove regular empty file '/root/temp/newdire/emp2'? y

rm: remove regular file '/root/temp/newdire/first.unics'? y

rm: remove regular file '/root/temp/newdire/first.unix'? y

rm: remove directory '/root/temp/newdire'? y

rm: remove regular file '/root/temp/second.unix'? y

rm: remove directory '/root/temp'? y

[root@hostname01 ~]# ls

anaconda-ks.cfg chap1 chap2 chapc chapD C_k Desktop Documents Downloads emp1 emp2 Music Pictures Public Templates Videos

[root@hostname01 ~]# cp

cp: missing file operand

Try 'cp --help' for more information.

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

[root@hostname01 ~]# cp /temp

cp: missing destination file operand after '/temp'

Try 'cp --help' for more information.

[root@hostname01 ~]# mv

mv: missing file operand

Try 'mv --help' for more information.

[root@hostname01 ~]# mv first.unix

mv: missing destination file operand after 'first.unix'

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.

[root@hostname01 ~]# cat > friends

Madhu 694465 09/07/68

Jamil   554467 08/09/67

Ajay   567576 01/04/66

Mano   7820077   09/07/68

David   8281292   09/09/60

simmi   7865425   12/12/70

Navin   2223411   30/05/68

33. Display contents of the file friends.

[root@hostname01 ~]# cat friends

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

[root@hostname01 ~]# cat friends > newfriends

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

[root@hostname01 ~]# cat friends newfriends

Madhu 694465   09/07/68

Jamil   554467   08/09/67

Ajay   567576   01/04/66

Mano   7820077   09/07/68

David   8281292   09/09/60

simmi   7865425   12/12/70

Navin   2223411   30/05/68

Madhu 694465   09/07/68

Jamil   554467   08/09/67

Ajay   567576   01/04/66

Mano   7820077   09/07/68

David   8281292   09/09/60

simmi   7865425   12/12/70

Navin   2223411   30/05/68

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

[root@hostname01 ~]# who

admin   seat0   2025-01-27 12:19 (login screen)

admin   tty2   2025-01-27 12:19 (tty2)

[root@hostname01 ~]# who > users

[root@hostname01 ~]# cat users

admin   seat0   2025-01-27 12:19 (login screen)

admin   tty2   2025-01-27 12:19 (tty2)

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

[root@hostname01 ~]# cat friends >> users

[root@hostname01 ~]# cat users

admin   seat0   2025-01-27 12:19 (login screen)

admin   tty2   2025-01-27 12:19 (tty2)

Madhu 694465 09/07/68

Jamil   554467 08/09/67

Ajay   567576 01/04/66

Mano   7820077   09/07/68

David   8281292   09/09/60

simmi   7865425   12/12/70

Navin   2223411   30/05/68

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

[root@hostname01 ~]# date

Mon Jan 27 07:45:53 PM IST 2025

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

```
[root@hostname01 ~]# cal 1 2003
   January 2003
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 "+ %"

    date "+%m"

    date "+%D"

    date "+%/%Training Activity"

    date "+%Training Activity"

    date "+%r"

```
[root@hostname01 ~]# date "+%"
%
[root@hostname01 ~]# date "+m"
m
[root@hostname01 ~]# date "+%m"
01
[root@hostname01 ~]# date "+%D"
01/27/25
[root@hostname01 ~]# date "+%/%Training Activity"
%/20:02:12raining Activity
[root@hostname01 ~]# date "+%Training Activity"
20:07:37raining Activity
[root@hostname01 ~]# date "+%r"
```

8:10:23 PM

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

[root@hostname01 ~]# man ls | col -b > lsdoc

2: Display the content of the lsdoc page wise.

[root@hostname01 ~]# less lsdoc

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

[root@hostname01 ~]# echo "hello i am vaishnavi" > data.txt

4: Display data.txt.

[root@hostname01 ~]# cat data.txt

hello i am vaishnavi

5: Remove the file data.txt.

[root@hostname01 ~]# rm data.txt

rm: remove regular file 'data.txt'? y

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

[root@hostname01 ~]# cat > data.txt

hello world

[root@hostname01 ~]# cat errorlog.txt

cat: data.txt: No such file or directory

[root@hostname01 ~]# cat data.txt 2> errorlog.txt

hello world

7: Display errorlog file.

[root@hostname01 ~]# cat errorlog.txt