**Using UNIX Basic Commands:**

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

pwd

The output is as follows.

/home/trg1

Soln: [root@hostname01 ~]# pwd

/root

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

Soln: [root@hostname01 ~]# echo $HOME

/root

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

4. Display the hidden files of your current directory.

Soln: [root@hostname01 ~]# ls -a

. .bash\_logout .config Downloads Public Videos

.. .bash\_profile .cshrc .local .ssh .viminfo

anaconda-ks.cfg .bashrc Desktop Music .tcshrc .xauth48QFcr

.bash\_history .cache Documents Pictures Templates

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

Soln: [root@hostname01 ~]# ls

anaconda-ks.cfg Documents Music Public Videos

Desktop Downloads Pictures Templates

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

Soln: [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,……..)

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

ls: cannot access 'chap[0-9a-z]\*': No such file or directory

[root@hostname01 ~]# ls chap?

ls: cannot access 'chap?': No such file or directory

[root@hostname01 ~]# touch chap1 chap2 chap3 chapa chapb chapz

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

chap1 chap2 chap3 chapa chapb chapz

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

directory. (Note: Check the directory using ls )

Soln: [root@hostname01 ~]# mkdir c\_prog

[root@hostname01 ~]# ls $HOME

anaconda-ks.cfg chap2 chapb Desktop Music Public

chap3 chapz Documents Pictures Templates

chap1 chapa c\_prog Downloads Videos

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

newdir

newdirectory

Sol: [root@hostname01 ~]# mkdir ~/newdir

[root@hostname01 ~]# mkdir ~/newdirectory

[root@hostname01 ~]# ls ~

anaconda-ks.cfg chap2 chapb Desktop Music Pictures Templates

C chap3 chapz Documents newdir prog Videos

chap1 chapa c\_prog Downloads newdirectory Public

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

your home directory.

Soln: [root@hostname01 ~]# ls -R

.:

anaconda-ks.cfg chap2 chapb Desktop Music Pictures Templates

C chap3 chapz Documents newdir prog Videos

chap1 chapa c\_prog Downloads newdirectory Public

./C:

./c\_prog:

./Desktop:

./Documents:

./Downloads:

./Music:

./newdir:

./newdirectory:

./Pictures:

./prog:

./Public:

./Templates:

./Videos:

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

Soln: root@hostname01 ~]# rmdir newdirectory

[root@hostname01 ~]# ls

anaconda-ks.cfg chap2 chapb Desktop Music prog Videos

C chap3 chapz Documents newdir Public

chap1 chapa c\_prog Downloads Pictures Templates

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

[root@hostname01 ~]# mkdir temp

[root@hostname01 ~]# ls ~

anaconda-ks.cfg chap2 chapb Desktop Music prog Templates

C chap3 chapz Documents newdir Public Videos

chap1 chapa c\_prog Downloads Pictures temp

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

above with the help of the directory listing command.

14. Create another directory directorynew under the temp directory.

Soln: [root@hostname01 ~]# cd temp/

[root@hostname01 temp]# mkdir directorynew

[root@hostname01 temp]# ls

directorynew

15. Change the directory to your home directory.

Soln: [root@hostname01 temp]# cd ~

[root@hostname01 ~]#

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

absolute path.

[root@hostname01 ~]# cd temp/directorynew

[root@hostname01 directorynew]#

Abs:

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

[root@hostname01 directorynew]#

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

Soln: root@hostname01 directorynew]# cd ~

[root@hostname01 ~]# rmdir C\_prog

rmdir: failed to remove 'C\_prog': No such file or directory

[root@hostname01 ~]# remove c\_prog

bash: remove: command not found...

[root@hostname01 ~]# rmdir c\_prog

[root@hostname01 ~]# ls ~

anaconda-ks.cfg chap2 chapb Documents newdir Public Videos

C chap3 chapz Downloads Pictures temp

chap1 chapa Desktop Music prog Templates

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

Soln: [root@hostname01 ~]# cd /etc

[root@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

chrony.keys ld.so.conf.d security

cifs-utils libaudit.conf selinux

cni libblockdev services

cockpit libibverbs.d sestatus.conf

containers libnl setroubleshoot

cron.d libpaper.d sgml

cron.daily libreport shadow

cron.deny libssh shadow-

cron.hourly libuser.conf shells

cron.monthly locale.conf skel

crontab localtime smartmontools

cron.weekly login.defs sos

crypto-policies logrotate.conf speech-dispatcher

crypttab logrotate.d ssh

csh.cshrc lsm ssl

csh.login lvm sssd

cups machine-id statetab.d

cupshelpers machine-info subgid

dbus-1 magic subgid-

dconf mailcap subuid

debuginfod makedumpfile.conf.sample subuid-

default man\_db.conf sudo.conf

depmod.d mcelog sudoers

dhcp microcode\_ctl sudoers.d

DIR\_COLORS mime.types sudo-ldap.conf

DIR\_COLORS.lightbgcolor mke2fs.conf sysconfig

dnf modprobe.d sysctl.conf

dnsmasq.conf modules-load.d sysctl.d

dnsmasq.d motd systemd

dracut.conf motd.d system-release

dracut.conf.d mtab system-release-cpe

egl multipath terminfo

enscript.cfg nanorc tmpfiles.d

environment netconfig tpm2-tss

ethertypes NetworkManager trusted-key.key

exports networks tuned

favicon.png nftables udev

filesystems nsswitch.conf udisks2

firefox nsswitch.conf.bak updatedb.conf

firewalld nvme UPower

flatpak openldap usb\_modeswitch.conf

fonts opt vconsole.conf

foomatic os-release vimrc

fprintd.conf ostree virc

fstab PackageKit vmware-tools

fuse.conf pam.d vulkan

fwupd papersize wgetrc

gcrypt passwd wireplumber

gdm passwd- wpa\_supplicant

geoclue pbm2ppa.conf X11

glvnd pinforc xattr.conf

gnupg pkcs11 xdg

GREP\_COLORS pkgconfig xml

groff pki yum

group plymouth yum.conf

group- pm yum.repos.d

grub2.cfg pnm2ppa.conf

grub.d polkit-1

[root@hostname01 etc]#

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

Soln: [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.

SOLN:

[root@hostname01 etc]# cat >first.unix <<EOF

> HI!GM everybody

> Welcome to the first exercise on UNIX

> Hope you enjoy doing the assignments.

> EOF

[root@hostname01 etc]# cat >first.unix <<EOF

HI!GM everybody

Welcome to the first exercise on UNIX

Hope you enjoy doing the 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)

Soln: p: overwrite '/root/first.unics'?

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

cp: overwrite '/root/first.unics'? y

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

Soln:

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

HI!GM Everyone

Welcome to the first excercise on UNIX.

Hope you enjoy doing assignments

HI!GM Everyone

Welcome to the first excercise on UNIX.

Hope you enjoy doing assignments

23. Create a new directory under the temp directory.

[root@hostname01 ~]# mkdir temp/newdir

[root@hostname01 ~]# cd temp

[root@hostname01 temp]# ls

directorynew newdir

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

temp sub directory.

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

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

[root@hostname01 temp]# ls /root/temp

directorynew newdir second.unix

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

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

rm: cannot remove '/home/admin/first.unics': No such file or directory

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

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

[root@hostname01 temp]# rm \*.

rm: cannot remove '\*.': No such file or directory

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

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

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

directory itself.

root@hostname01 temp]# rm -rf /root/temp/\* && rmdir /root/temp

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 newdir1 newdir2

mv: cannot stat 'newdir1': No such file or directory

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<<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 ~]$ sudo cp /friends ~/Desktop/

[sudo] password for admin:

Sorry, try again.

[sudo] password for admin:

[admin@hostname01 ~]$ cat ~/Desktop/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

[admin@hostname01 ~]$ cat 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

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

[admin@hostname01 Desktop]$ cat friends newfriends

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 2025-01-27 20:01 (login screen)

admin tty2 2025-01-27 20:01 (tty2)

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

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

[admin@hostname01 ~]$ cat users

admin seat0 2025-01-27 20:01 (login screen)

admin tty2 2025-01-27 20:01 (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

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

time displayed?

[admin@hostname01 ~]$ date

Tue Jan 28 07:51:12 AM IST 2025

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

admin@hostname01 ~]$ cal 10 2001

October 2001

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”

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

%

[admin@hostname01 ~]$ date “+%m”

date: invalid date ‘“+%m”’

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

01

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

01/28/25

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

%/08:02:56raining Activity

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

08:03:42raining Activity

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

08:04:01 AM

Using Pipes and Filters:

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

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

2: Display the content of the lsdoc page wise.

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

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

4: Display data.txt.

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

hi Tanu

5: Remove the file data.txt.

admin@hostname01 ~]$ rm -rf data.txt

[admin@hostname01 ~]$ ls

Desktop Documents Downloads lsdoc Music newfriend Pictures Public Templates users Videos

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

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

[admin@hostname01 ~]$ cat errorlog.txt

cat: data.txt: No such file or directory

7: Display errorlog file.

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

[admin@hostname01 ~]$ cat errorlog.txt

cat: data.txt: No such file or directory