**SUPREET BIRAJDAR**

**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\_profile Desktop .local Public

.. .bashrc Documents .mozilla Templates

.bash\_history .cache Downloads Music Videos

.bash\_logout .config first.unix Pictures .viminfo

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

[admin@hostname01 ~]$ ls $HOME

Desktop Downloads Music Public Videos

Documents first.unix Pictures Templates

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

[admin@hostname01 ~]$ ls -l

total 4

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 16 Jan 27 21:41 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. 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 ~]$ touch chap1 chap2 chap3 chapa chapb chapc chapz chap9

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

chap1

chap2

chap3

chap9

chapa

chapb

chapc

chapz

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

**directory. (Note: Check the directory using ls )**

[admin@hostname01 ~]$ mkdir ~/Cprog

[admin@hostname01 ~]$ ls

chap1 chap3 chapa chapc Cprog Documents first.unix Pictures Templates

chap2 chap9 chapb chapz Desktop Downloads Music Public Videos

[admin@hostname01 ~]$

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

**newdir**

**Newdirectory**

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

[admin@hostname01 ~]$ ls -l

total 4

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap1

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap2

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap3

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap9

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapa

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapb

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapc

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapz

drwxr-xr-x. 2 admin admin 6 Jan 27 22:28 Cprog

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 16 Jan 27 21:41 first.unix

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

drwxr-xr-x. 2 admin admin 6 Jan 27 22:35 newdir

drwxr-xr-x. 2 admin admin 6 Jan 27 22:35 newdirectory

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

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

**your home directory.**

[admin@hostname01 ~]$ ls -R ~/

/home/admin/:

chap1 chap2 chap3 chap9 chapa chapb chapc chapz Cprog Desktop Documents Downloads first.unix Music newdir newdirectory Pictures Public Templates Videos

/home/admin/Cprog:

/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:

[admin@hostname01 ~]$

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

[admin@hostname01 ~]$ rmdir ~/newdirectory

[admin@hostname01 ~]$ ls -l

total 4

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap1

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap2

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap3

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap9

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapa

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapb

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapc

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapz

drwxr-xr-x. 2 admin admin 6 Jan 27 22:28 Cprog

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 16 Jan 27 21:41 first.unix

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

drwxr-xr-x. 2 admin admin 6 Jan 27 22:35 newdir

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

[admin@hostname01 ~]$

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

[admin@hostname01 ~]$ mkdir ~/temp

[admin@hostname01 ~]$ ls -l

total 4

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap1

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap2

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap3

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chap9

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapa

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapb

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapc

-rw-r--r--. 1 admin admin 0 Jan 27 22:24 chapz

drwxr-xr-x. 2 admin admin 6 Jan 27 22:28 Cprog

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 16 Jan 27 21:41 first.unix

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

drwxr-xr-x. 2 admin admin 6 Jan 27 22:35 newdir

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 27 22:43 temp

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

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

[admin@hostname01 ~]$

**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 ~/newdir

**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 ~]$ cd ~

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

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

ABSOLUTE: [admin@hostname01 ~]$ cd ~/temp/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 containers egl gshadow libnl multipath popt.d setroubleshoot terminfo

adjtime cron.d enscript.cfg gshadow- libpaper.d nanorc printcap sgml tmpfiles.d

aliases cron.daily environment gss libreport netconfig profile shadow tpm2-tss

alsa cron.deny ethertypes host.conf libssh NetworkManager profile.d shadow- trusted-key.key

alternatives cron.hourly exports hostname libuser.conf networks protocols shells tuned

anacrontab cron.monthly favicon.png hosts locale.conf nftables pulse skel udev

appstream.conf crontab filesystems hp localtime nsswitch.conf qemu-ga smartmontools udisks2

asound.conf cron.weekly firefox inittab login.defs nsswitch.conf.bak ras sos updatedb.conf

at.deny crypto-policies firewalld inputrc logrotate.conf nvme rc.d speech-dispatcher UPower

audit crypttab flatpak iproute2 logrotate.d openldap rc.local ssh usb\_modeswitch.conf

authselect csh.cshrc fonts iscsi lsm opt redhat-release ssl vconsole.conf

avahi csh.login foomatic issue lvm os-release request-key.conf sssd vimrc

bash\_completion.d cups fprintd.conf issue.d machine-id ostree request-key.d statetab.d virc

bashrc cupshelpers fstab issue.net machine-info PackageKit resolv.conf subgid vmware-tools

bindresvport.blacklist dbus-1 fuse.conf kdump magic pam.d rpc subgid- vulkan

binfmt.d dconf fwupd kdump.conf mailcap papersize rpm subuid wgetrc

bluetooth debuginfod gcrypt kernel makedumpfile.conf.sample passwd rsyncd.conf subuid- wireplumber

brlapi.key default gdm keys man\_db.conf passwd- rsyslog.conf sudo.conf wpa\_supplicant

brltty depmod.d geoclue keyutils mcelog pbm2ppa.conf rsyslog.d sudoers X11

brltty.conf dhcp glvnd krb5.conf microcode\_ctl pinforc rwtab.d sudoers.d xattr.conf

centos-release DIR\_COLORS gnupg krb5.conf.d mime.types pkcs11 samba sudo-ldap.conf xdg

chromium DIR\_COLORS.lightbgcolor GREP\_COLORS ld.so.cache mke2fs.conf pkgconfig sane.d sysconfig xml

chrony.conf dnf groff ld.so.conf modprobe.d pki sasl2 sysctl.conf yum

chrony.keys dnsmasq.conf group ld.so.conf.d modules-load.d plymouth security sysctl.d yum.conf

cifs-utils dnsmasq.d group- libaudit.conf motd pm selinux systemd yum.repos.d

cni dracut.conf grub2.cfg libblockdev motd.d pnm2ppa.conf services system-release

cockpit dracut.conf.d grub.d libibverbs.d mtab polkit-1 sestatus.conf system-release-cpe

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

[admin@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 ~]$ vim first.unix

Press i to enter insert mode in that   
In insert mode type the above sentences

Then press esc to enter into command mode then type  
:wq and hit enter.

**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

[admin@hostname01 ~]$ ls

chap1 chap2 chap3 chap9 chapa chapb chapc chapz Desktop Documents Downloads first.unics first.unix Music Pictures Public temp Templates Videos

[admin@hostname01 ~]$

**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 ~/temp/sub

[admin@hostname01 ~]$ cd temp

[admin@hostname01 temp]$ ls

directorynew sub

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**

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

[admin@hostname01 temp]$ ls /temp

second.unix

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

[admin@hostname01 ~]$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 \*

rm: cannot remove 'directorynew': Is a directory

rm: cannot remove 'sub': Is a directory

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

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

mv: cannot stat '/home/admin/temp/\*[aco]': No such file or directory

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

admin@hostname01 temp]$ 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.**

[admin@hostname01 ~]$ rm -r temp

[admin@hostname01 ~]$ ls

chap1 chap2 chap3 chap9 chapa chapb chapc chapz Desktop Documents Downloads Music Pictures Public Templates Videos

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

cp will give missing destination file error 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 Desktop]$ 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

**33. Display contents of the file friends.**

[admin@hostname01 Desktop]$ 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 Desktop]$ 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.**

[admin@hostname01 ~]$ who

admin seat0 2025-01-27 13:15 (login screen)

admin tty2 2025-01-27 13:15 (tty2)

[admin@hostname01 ~]$ who > users

[admin@hostname01 ~]$ cat users

admin seat0 2025-01-27 13:15 (login screen)

admin tty2 2025-01-27 13:15 (tty2)

**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

Mon Jan 27 11:57:05 PM IST 2025

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

[admin@hostname01 ~]$ cal 10 2002

October 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 “+ %” : 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