1.Display your current directory.

command: **pwd**

output:

```
ak@ak-Latitude-E4300:~$ pwd
/home/ak
```

2.Change to the /etc directory.

command: **cd /etc**

output:

```
ak@ak-Latitude-E4300:~$ cd /etc
ak@ak-Latitude-E4300:/etc$
```

3.Now,change to your home directory using single commamd.

command: **cd ~**

output:

```
ak@ak-Latitude-E4300:/etc$ cd ~
ak@ak-Latitude-E4300:~$
```

4.Change to the parent directory of the current directory.

command: **cd ..**

output:

```
ak@ak-Latitude-E4300:~$ cd ..
ak@ak-Latitude-E4300:/home$
```

5.Go to the root directory.

command: **cd /**

output:

```
ak@ak-Latitude-E4300:/home$ cd /
ak@ak-Latitude-E4300:/$
```

6.Give a long listing of the root directory.

command: **ls -l /**

output:

```
ak@ak-Latitude-E4300:~$ ls -l /
total 100
drwxr-xr-x   2 root root  4096 Jan 30 22:52 bin
drwxr-xr-x   3 root root  4096 Jan 30 22:54 boot
drwxr-xr-x   2 root root  4096 Jan 30 22:48 cdrom
drwxr-xr-x  20 root root  4300 Feb 21 13:24 dev
drwxr-xr-x 122 root root 12288 Jan 30 22:53 etc
drwxr-xr-x   3 root root  4096 Jan 30 22:48 home
lrwxrwxrwx   1 root root    33 Jan 30 22:49 initrd.img -> boot/initrd.img-4.15.0-29-generic
lrwxrwxrwx   1 root root    33 Jan 30 22:44 initrd.img.old -> boot/initrd.img-4.15.0-29-generic
drwxr-xr-x  21 root root  4096 Jan 30 22:52 lib
drwxr-xr-x   2 root root  4096 Jul 25  2018 lib64
drwx------   2 root root 16384 Jan 30 22:44 lost+found
drwxr-xr-x   3 root root  4096 Jan 30 23:05 media
drwxr-xr-x   2 root root  4096 Jul 25  2018 mnt
drwxr-xr-x   2 root root  4096 Jul 25  2018 opt
dr-xr-xr-x 232 root root     0 Feb 21 12:57 proc
drwx------   3 root root  4096 Jul 25  2018 root
drwxr-xr-x  26 root root   760 Feb 21 14:06 run
drwxr-xr-x   2 root root 12288 Jan 30 22:54 sbin
drwxr-xr-x  10 root root  4096 Jan 30 23:00 snap
drwxr-xr-x   2 root root  4096 Jul 25  2018 srv
dr-xr-xr-x  13 root root     0 Feb 21 12:57 sys
drwxrwxrwt  16 root root  4096 Feb 21 14:06 tmp
drwxr-xr-x  10 root root  4096 Jul 25  2018 usr
drwxr-xr-x  14 root root  4096 Jul 25  2018 var
lrwxrwxrwx   1 root root    30 Jan 30 22:49 vmlinuz -> boot/vmlinuz-4.15.0-29-generic
```

7.Give a listing of a last 10 files in the root directory.

command: **ls / | tail**

output:

```
ak@ak-Latitude-E4300:/$ ls / |tail
root
run
sbin
snap
srv
sys
tmp
usr
var
vmlinuz
```

8.Stay where you are, and list the contents of /etc.

command: **ls /etc**

output:

```
ak@ak-Latitude-E4300:/$ ls /etc
acpi                     dconf                hosts             lsb-release      popularity-contest.conf  ssl
adduser.conf             debconf.conf         hosts.allow       ltrace.conf      ppp                      subgid
alternatives             debian_version       hosts.deny        machine-id       profile                  subgid-
anacrontab               default              hp                magic            profile.d                subuid
apg.conf                 deluser.conf         ifplugd           magic.mime       protocols                subuid-
apm                      depmod.d             ImageMagick-6     mailcap          pulse                    sudoers
apparmor                 dhcp                 init              mailcap.order    python2.7                sudoers.d
apparmor.d               dictionaries-common  init.d            manpath.config   python3                  sysctl.conf
apport                   dpkg                 initramfs-tools   mime.types       python3.6                sysctl.d
appstream.conf           drirc                inputrc           mke2fs.conf      rc0.d                    systemd
apt                      emacs                insserv.conf.d    modprobe.d       rc1.d                    terminfo
avahi                    environment          iproute2          modules          rc2.d                    thermald
bash.bashrc              firefox              issue             modules-load.d   rc3.d                    thunderbird
bash_completion          fonts                issue.net         mtab             rc4.d                    timezone
bash_completion.d        fstab                kernel            mtools.conf      rc5.d                    tmpfiles.d
bindresvport.blacklist   fuse.conf            kernel-img.conf   nanorc           rc6.d                    ucf.conf
binfmt.d                 fwupd                kerneloops.conf   netplan          rcS.d                    udev
bluetooth                gai.conf             ldap              network          resolvconf               udisks2
brlapi.key               gdb                  ld.so.cache       NetworkManager   resolv.conf              ufw
brltty                   gdm3                 ld.so.conf        networks         rmt                      updatedb.conf
brltty.conf              geoclue              ld.so.conf.d      newt             rpc                      update-manager
ca-certificates          ghostscript          legal             nsswitch.conf    rsyslog.conf             update-motd.d
ca-certificates.conf     glvnd                libao.conf        opt              rsyslog.d                update-notifier
calendar                 gnome                libaudit.conf     os-release       sane.d                   UPower
chatscripts              groff                libblockdev       PackageKit       securetty                usb_modeswitch.conf
console-setup            group                libnl-3           pam.conf         security                 usb_modeswitch.d
cracklib                 group-               libpaper.d        pam.d            selinux                  vim
cron.d                   grub.d               libreoffice       papersize        sensors3.conf            vtrgb
cron.daily               gshadow              lintianrc         passwd           sensors.d                wgetrc
cron.hourly              gshadow-             locale.alias      passwd-          services                 wpa_supplicant
cron.monthly             gss                  locale.gen        pcmcia           shadow                   X11
crontab                  gtk-2.0              localtime         perl             shadow-                  xdg
cron.weekly              gtk-3.0              logcheck          pki              shells                   zsh_command_not_found
cups                     hdparm.conf          login.defs        pm               skel
cupshelpers              host.conf            logrotate.conf    pnm2ppa.conf     speech-dispatcher
dbus-1                   hostname             logrotate.d       polkit-1         ssh
```

9.Create a directory testdir in your home directory.

Command: **mkdir ~/testdir**

output:

```
ak@ak-Latitude-E4300:/$ mkdir ~/testdir
ak@ak-Latitude-E4300:/$ ls ~
Desktop     Downloads                Music     Public      Templates  Videos
Documents   examples.desktop  Pictures  sample.txt  testdir
```

10. Change to the /etc directory, stay there and create a directory newdir in your home directory(using a single command).

    Command: **cd *etc* | *mkdir ~/newdir***

    output:

```
ak@ak-Latitude-E4300:/$ cd etc | mkdir ~/newdir
ak@ak-Latitude-E4300:/$ ls ~
Desktop    Downloads        Music    Pictures   sample.txt  testdir
Documents  examples.desktop newdir   Public     Templates   Videos
```

11. Create in one command the directories ~/dir1/dir2/dir3 (dir3 is a subdirectory from dir2, and dir2 is a subdirectory from dir1).

    Command: **mkdir -p ~/dir1/dir2/dir3**

    output:

```
ak@ak-Latitude-E4300:~$ mkdir -p dir1/dir2/dir3
ak@ak-Latitude-E4300:~$ find dir1
dir1
dir1/dir2
dir1/dir2/dir3
```

12. Display the calendar for April 2019.

    command: **cal april 2019**

    output:

```
ak@ak-Latitude-E4300:~$ cal april 2019
     April 2019
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
```

13. Display that 'There are .... files in my current directory' . The ..... should be filled with the count of the files.

    Command: **echo "There are ` ls | wc -w ` in my current directory"**

    output:

```
ak@ak-Latitude-E4300:~$ echo "There are ` ls | wc -w `  in my current directory"
There are 13  in my current directory
```

14. List all the files (including hidden files) in your home directory.

    Command: **ls -a ~**

    output:

```
ak@ak-Latitude-E4300:~$ ls -a ~
.               .bash_logout  .config  Documents           .gnupg         .mozilla
 Pictures   sample.txt                 Templates
..              .bashrc       Desktop  Downloads           .ICEauthority  Music
 .profile  .ssh                        testdir
.bash_history   .cache        dir1     examples.desktop    .local         newdir
 Public     .sudo_as_admin_successful  Videos
```

15. Redirect the output of the above command to a new file FileList.txt.

        Command: **ls -a ~ >>FileList.txt**

        output:

```
ak@ak-Latitude-E4300:~$ ls -a ~ >>FileList.txt
ak@ak-Latitude-E4300:~$ cat FileList.txt
.
..
.bash_history
.bash_logout
.bashrc
.cache
.config
Desktop
dir1
Documents
Downloads
examples.desktop
FileList.txt
.gnupg
.ICEauthority
.local
.mozilla
Music
newdir
Pictures
.profile
Public
sample.txt
.ssh
.sudo_as_admin_successful
Templates
testdir
Videos
```

16. Redirect the number of lines of FileList.txt to CountFile.txt.

        Command: **wc -l Filelist.txt >> countfile.txt**

        output:

```
ak@ak-Latitude-E4300:~$ wc -l FileList.txt >> countfile.txt
ak@ak-Latitude-E4300:~$ cat countfile.txt
28 FileList.txt
```

17. List all the files in your home directory starting with 's' .

        command: **ls | grep s***

        output:

```
ak@ak-Latitude-E4300:~$ ls | grep s*
sample.txt
```

18. List all the file-names starting with "a", "b" or "s" .

        command: **ls [abs]***

        output:

```
abc.txt   bag.txt   sample.txt
ak@ak-Latitude-E4300:~$ ls [abs]*
abc.txt   bag.txt   sample.txt
```

19. Create two files 'Countries.txt', containing country names and their corresponding capital cities and 'Story.txt' contains some arbitrary lines of text.

Command: **nano countries.txt**
nano story.txt

output:

```
ak@ak-Latitude-E4300:~$ nano countries.txt
ak@ak-Latitude-E4300:~$ nano story.txt
ak@ak-Latitude-E4300:~$ cat countries.txt
country         capital
australia       vienna
bangladesh      dhaka
china           beiging
france          paris
india           new delhi
italy           rome
japan           tokyo
pakistan        islamabad
russia          moskow
spain           madrid

ak@ak-Latitude-E4300:~$ cat story.txt
It is the year 1975, when Charlotte Von Sledvin, a 19-year-old student of a Swedish
royal family, travels to India to get a portrait made by a gifted artist. The artist was
born into a poor Indian family of the lowest caste, also known as the
"untouchables." Despite the incredibly difficult circumstances, the artist named
Pradyumna Kumar Mahanandia had gained an outstanding reputation for being a
gifted painter. His reputation led Charlotte Von Sledvin to travel all the way to India to get her portrait done.
```

20. Convert all lowercase characters from 'Story.txt' to uppercase and store it in a file 'Capstory.txt'.

Command: **tr [:lower:] [:upper:] < story.txt >> capstory.txt**

output:

```
ak@ak-Latitude-E4300:~$ tr [:lower:] [:upper:] < story.txt >> capstory.txt
ak@ak-Latitude-E4300:~$ cat capstory.txt
IT IS THE YEAR 1975, WHEN CHARLOTTE VON SLEDVIN, A 19-YEAR-OLD STUDENT OF A SWED
ISH
ROYAL FAMILY, TRAVELS TO INDIA TO GET A PORTRAIT MADE BY A GIFTED ARTIST. THE AR
TIST WAS
BORN INTO A POOR INDIAN FAMILY OF THE LOWEST CASTE, ALSO KNOWN AS THE
"UNTOUCHABLES." DESPITE THE INCREDIBLY DIFFICULT CIRCUMSTANCES, THE ARTIST NAMED

PRADYUMNA KUMAR MAHANANDIA HAD GAINED AN OUTSTANDING REPUTATION FOR BEING A
GIFTED PAINTER. HIS REPUTATION LED CHARLOTTE VON SLEDVIN TO TRAVEL ALL THE WAY T
O INDIA TO GET HER PORTRAIT DONE.
```

21. Toggle the cases in 'Story.txt' and store it in a file 'Togglestory.txt'.

Command: **tr 'A-Za-z' 'a-zA-z' < story.txt >> togglestory.txt**

output:

```
ak@ak-Latitude-E4300:~$ tr 'A-Za-z' 'a-zA-z' < story.txt >> togglestory.txt
ak@ak-Latitude-E4300:~$ cat togglestory.txt
iT IS THE year 1975, WHEN charlotte von  sledvin, A 19-YEAR-OLD STUDENT OF A swe
dish
ROYAL FAMILY, TRAVELS TO india TO GET A PORTRAIT MADE BY A GIFTED ARTIST. tHE AR
TIST WAS
BORN INTO A POOR indian FAMILY OF THE LOWEST CASTE, ALSO KNOWN AS THE
"UNTOUCHABLES." dESPITE THE INCREDIBLY DIFFICULT CIRCUMSTANCES, THE ARTIST NAMED

pRADYUMNA kUMAR mAHANANDIA HAD GAINED AN OUTSTANDING REPUTATION FOR BEING A
GIFTED PAINTER. hIS REPUTATION LED charlotte von sledvin TO TRAVEL ALL THE WAY T
O iNDIA TO GET HER PORTRAIT DONE.
```

22. Sort the contents of 'Countries.txt' with Capital as the primary sort key and write the sorted output to 'SortCountry.txt' .

Command: **sort -k2 countries.txt >> sortCountries.txt**

output:

```
ak@ak-Latitude-E4300:~$ sort -k2 countries.txt >> sortCountries.txt
ak@ak-Latitude-E4300:~$ cat sortCountries.txt


china   beiging
bangladesh   dhaka
pakistan   islamabad
spain   madrid
russia   moskow
india   new delhi
france   paris
italy   rome
japan   tokyo
australia   vienna
```

23. Display only the capital cities from 'Countries.txt'.

Command: **awk '{print $2}' countries.txt**

output:

```
ak@ak-Latitude-E4300:~$ awk '{print $2}' countries.txt

vienna
dhaka
beiging
paris
new
rome
tokyo
islamabad
moskow
madrid
```

24. Locate all '.txt' and '.doc' files in the current directory .

Command: **ls *.txt *.doc**

output:

```
ak@ak-Latitude-E4300:~$ ls *.txt *.doc
abc.doc  bag.txt        countries.txt  sortCountries.txt  togglestory.txt
abc.txt  capstory.txt   FileList.txt   sortcountry.txt
a.txt    countfile.txt  sample.txt     story.txt
```

25. Count the number of occurence of 'the' in 'Story.txt'.

Command: **grep -o the countries.txt**

output:

```
ak@ak-Latitude-E4300:~$ grep -o the story.txt | wc -w
6
```

SUBMITTED BY
ABDUL KHADER PV
ROLL NO:64