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 command.

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 -1/

```
ak@ak-Latitude-E4300:~$ ls -l /
total 100
drwxr-xr-x
              2 root root 4096 Jan 30 22:52 bin
            3 root root
2 root root
drwxr-xr-x
                           4096 Jan 30 22:54 boot
                           4096 Jan 30 22:48 cdrom
drwxr-xr-x
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
            1 root root
1 root root
                             33 Jan 30 22:49 initrd.img -> boot/initrd.img-4.15.0-29-generic
lrwxrwxrwx
                              33 Jan 30 22:44 initrd.img.old -> boot/initrd.img-4.15.0-29-generic
lrwxrwxrwx
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
           2 root root
                           4096 Jul 25 2018 mnt
drwxr-xr-x
                           4096 Jul 25 2018 opt
drwxr-xr-x
            2 root root
dr-xr-xr-x 232 root root
                             0 Feb 21 12:57 proc
                           4096 Jul 25 2018 root
drwx-----
             3 root 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
                           4096 Jul 25
                                        2018 srv
            2 root root
           13 root root
                             0 Feb 21 12:57 sys
dr-xr-xr-x
                           4096 Feb 21 14:06 tmp
drwxrwxrwt 16 root root
drwxr-xr-x 10 root root
                           4096 Jul 25 2018 usr
drwxr-xr-x 14 root root
                           4096 Jul 25 2018 var
                             30 Jan 30 22:49 vmlinuz -> boot/vmlinuz-4.15.0-29-generic
lrwxrwxrwx
             1 root root
```

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 whinuz
```

8.Stay where you are, and list the contents of /etc. command: ls /etc output:

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

9. Create a directory testdir in your home directory.

Command: mkdir ~/testdir

```
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.desk<u>t</u>op 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:

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 ~

```
ak@ak-Latitude-E4300:~$ ls -a
               .bash logout .config
                                       Documents
                                                                         .mozilla
                                                          .gnupg
                                       Templates
 Pictures
           sample.txt
               .bashrc
                                       Downloads
                             Desktop
                                                          .ICEauthority
                                                                         Music
 .profile .ssh
                                       testdir
               .cache
                                       examples.desktop
 bash history
                                                         .local
                                                                         newdir
                             dir1
 Public
           .sudo as admin successful
                                       Videos
```

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

Command: İs -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
.confia
Desktop
dir1
Documents
Downloads
examples.desktop
FileList.txt
. anupa
.ICEauthority
.local
.mozilla
Music
newdir
Pictures
.profile
Public
sample.txt
.ssh
.sudo as admin successful
Templates
testdir
Vi dens
```

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]*
```

```
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
australia
                                         capital
                                         vienna
bangladesh
                                         dhaka
china
                                         beiaina
                                         paris
 france
                                         new delhi
india
italy
                                          гоме
japan
                                          tokyo
pakistan
                                          islamabad
 russia
                                          moskow
spain
                                          madrid
ak@ak-Latitude-E4300:~$ cat story.txt
akgak-Latttude-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

```
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 TO INDIA TO GET HER PORTRAIT DONE.
```

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

O INDIA TO GET HER PORTRAIT DONE.

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

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
```

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