

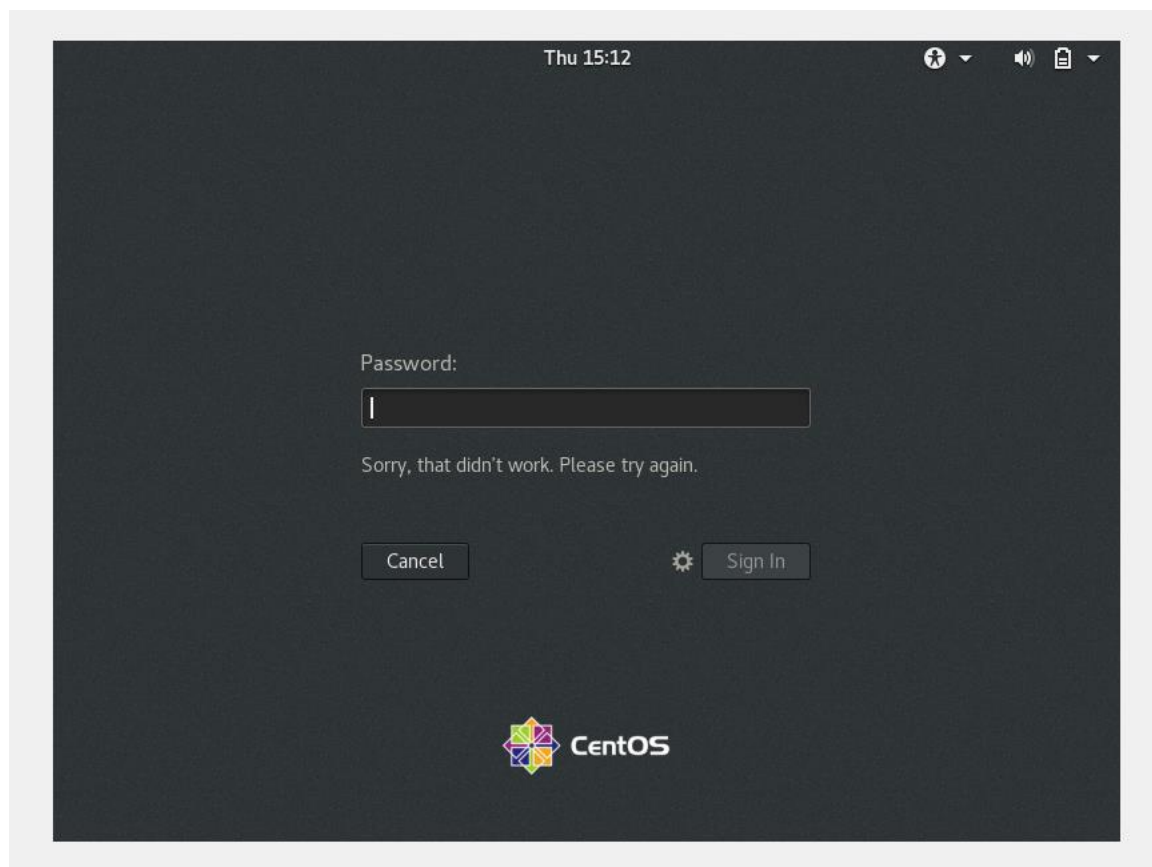
ASSIGNMENT-1

Question1:-

Connect and disconnect with login Access

- What happens when you login a non-existent users or username?

Ans- We can give a username/user at first on Username prompt but it will give a login denied error at the time of asking password because no such user exist in centos machine.



Question-2

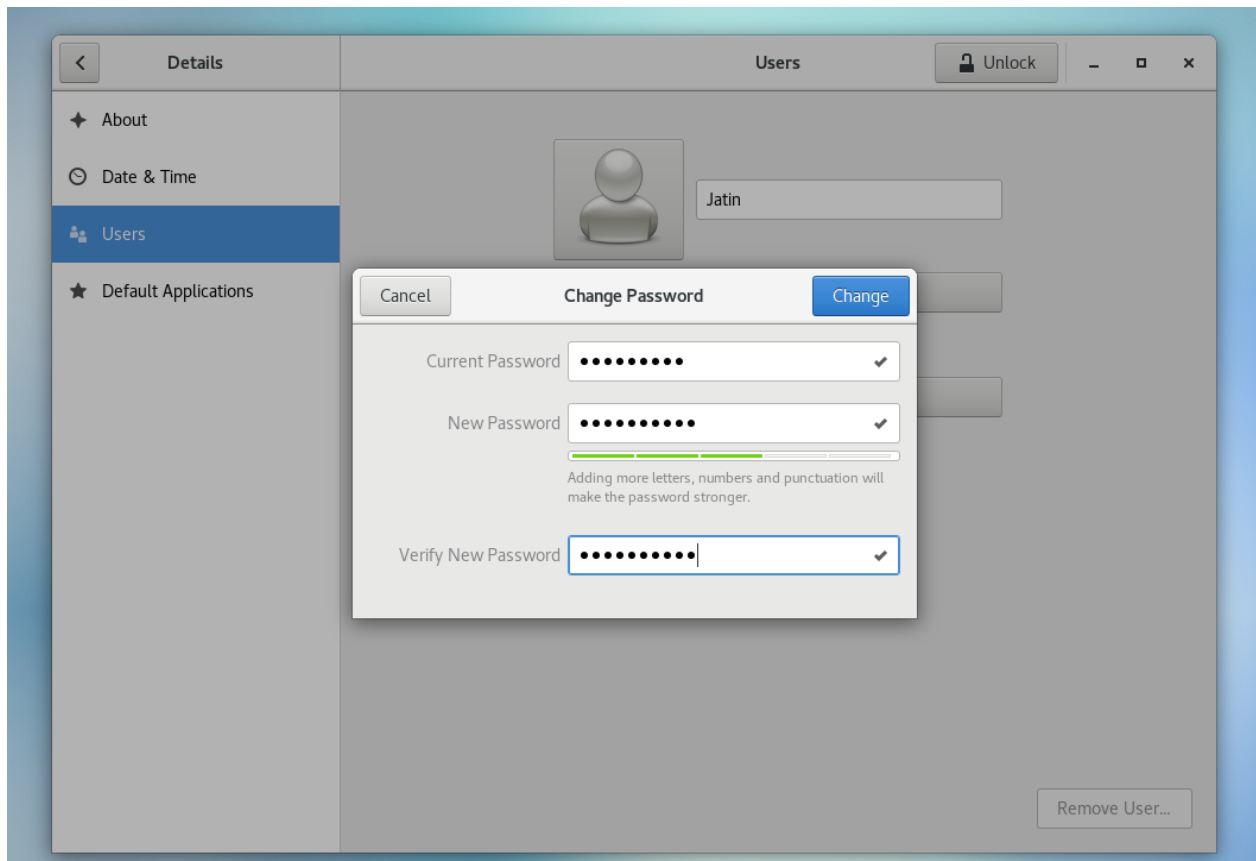
Password changing

- Change your password into ***IneuR0n#42*** and hit the **Enter** key

It will allow changing the password of the system as it satisfies all the condition of changing password.

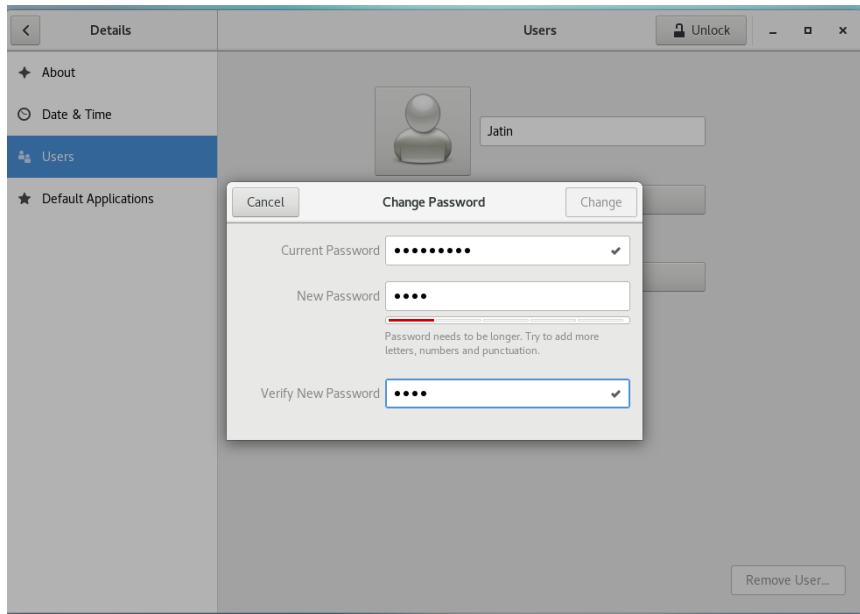
There must be 1 uppercase, 1 number and 1 special character and 8-character length in password.

Same rule is followed on terminal as well.



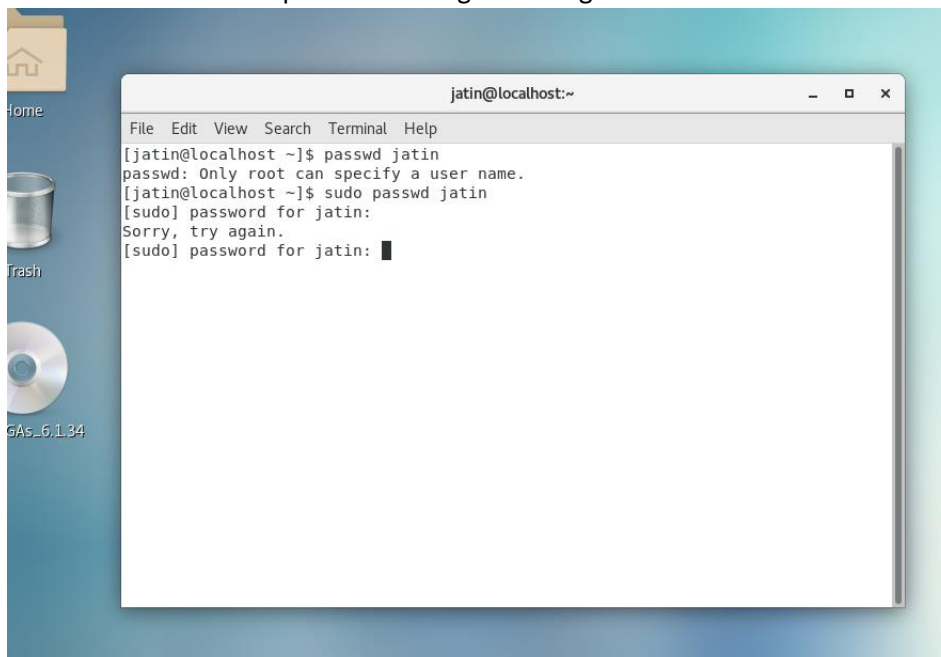
- Change password but use like password **1234** or **abcd**

It won't allow user to change password because on short length.



- Change password but now don't use any password just hit **Enter** key

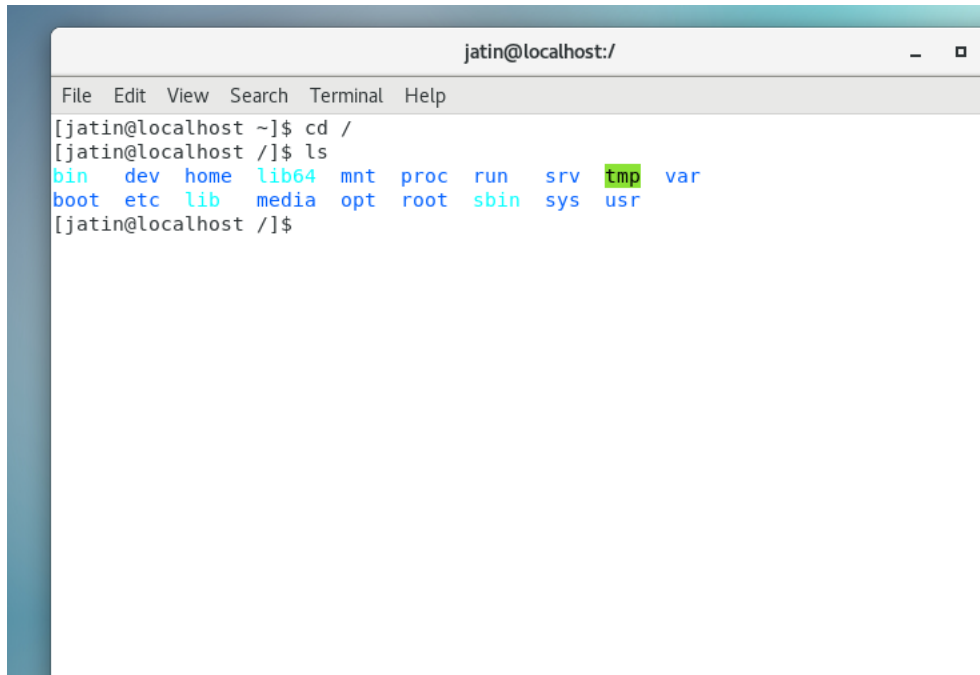
There must be password to login. It will give error.



Question - 3

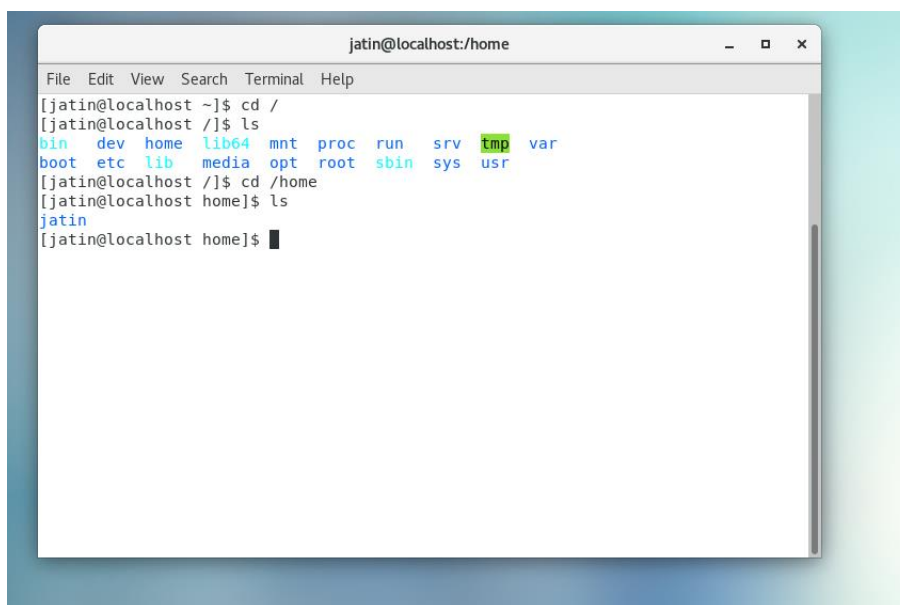
Working with Directories

- command **cd /** and then **ls**
It will redirect us to root directory

A terminal window titled 'jatin@localhost:/' with a menu bar (File, Edit, View, Search, Terminal, Help). The command history shows: [jatin@localhost ~]\$ cd /, [jatin@localhost /]\$ ls, and the output of ls: bin dev home lib64 mnt proc run srv tmp var, boot etc lib media opt root sbin sys usr. The 'tmp' directory is highlighted in green in the output.

```
jatin@localhost: /  
File Edit View Search Terminal Help  
[jatin@localhost ~]$ cd /  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib   media  opt  root  sbin sys  usr  
[jatin@localhost /]$
```

- **cd /home**
It will redirect us to home directory in system i.e current user directory.

A terminal window titled 'jatin@localhost:/home' with a menu bar (File, Edit, View, Search, Terminal, Help). The command history shows: [jatin@localhost ~]\$ cd /, [jatin@localhost /]\$ ls, [jatin@localhost /]\$ cd /home, [jatin@localhost home]\$ ls, and the output of ls: jatin. The 'jatin' directory is highlighted in blue in the output.

```
jatin@localhost:/home  
File Edit View Search Terminal Help  
[jatin@localhost ~]$ cd /  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib   media  opt  root  sbin sys  usr  
[jatin@localhost /]$ cd /home  
[jatin@localhost home]$ ls  
jatin  
[jatin@localhost home]$
```

- **cd ..**

It will redirect us to one directory back

```
jatin@localhost: /  
File Edit View Search Terminal Help  
[jatin@localhost ~]$ cd /  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ cd /home  
[jatin@localhost home]$ ls  
jatin  
[jatin@localhost home]$ cd ..  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$
```

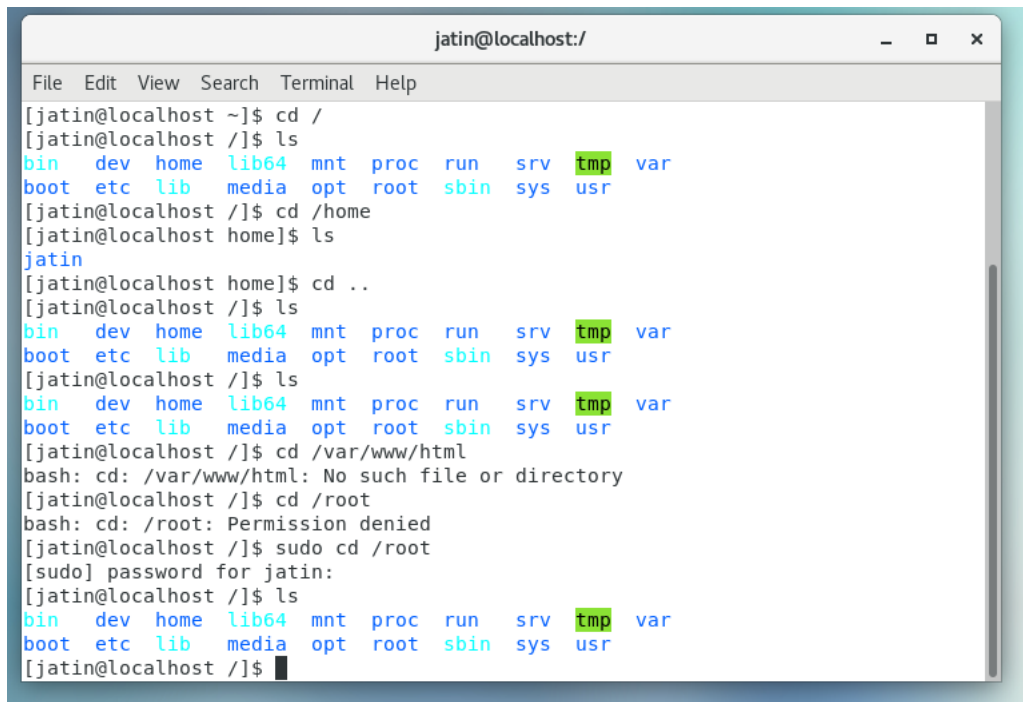
- **cd /var/www/html**

It will give error because no such directory on the system.

This directory will be created automatically when we install Apache Server on CentOS machine.

```
jatin@localhost: /  
File Edit View Search Terminal Help  
[jatin@localhost ~]$ cd /  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ cd /home  
[jatin@localhost home]$ ls  
jatin  
[jatin@localhost home]$ cd ..  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ cd /var/www/html  
bash: cd: /var/www/html: No such file or directory  
[jatin@localhost /]$
```

- **cd /root**
It will give permission denied access on



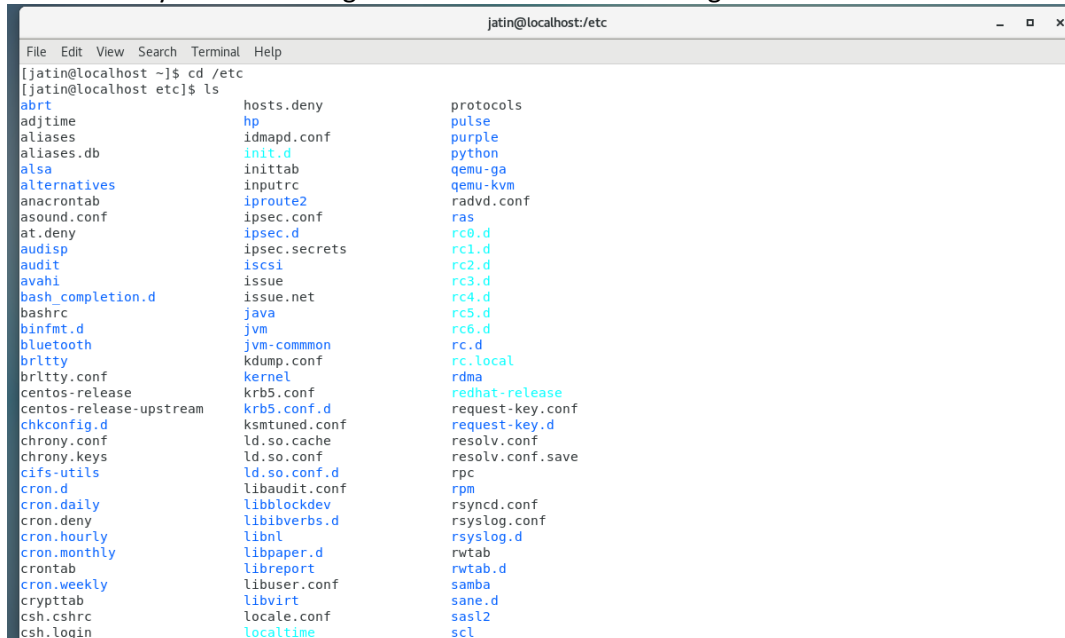
```
jatin@localhost:/  
File Edit View Search Terminal Help  
[jatin@localhost ~]$ cd /  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ cd /home  
[jatin@localhost home]$ ls  
jatin  
[jatin@localhost home]$ cd ..  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$ cd /var/www/html  
bash: cd: /var/www/html: No such file or directory  
[jatin@localhost /]$ cd /root  
bash: cd: /root: Permission denied  
[jatin@localhost /]$ sudo cd /root  
[sudo] password for jatin:  
[jatin@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot etc  lib  media  opt  root  sbin  sys  usr  
[jatin@localhost /]$
```

Question-4

Working with File Listing

- **cd /etc**

This directory contains configuration related files. It has large number of files



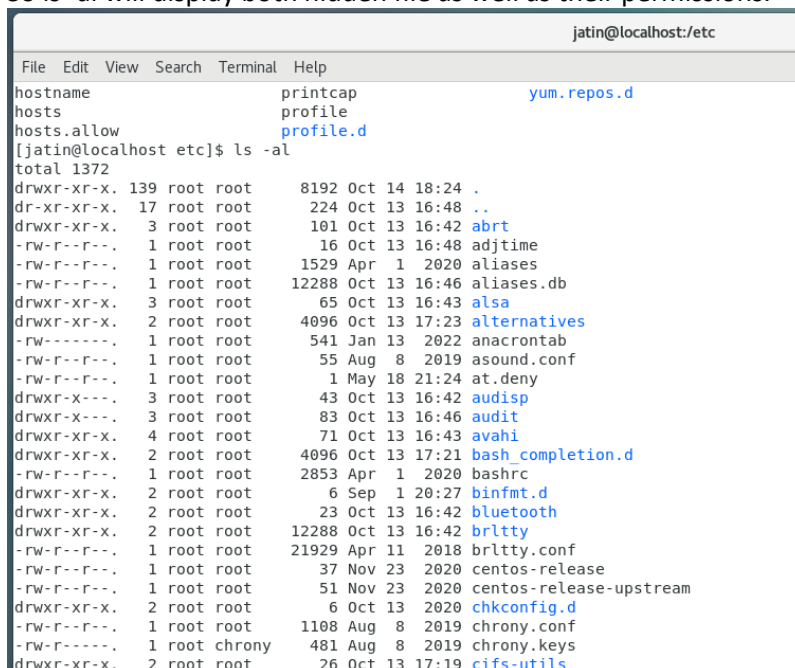
```
jatin@localhost:~$ cd /etc
[jatin@localhost etc]$ ls
abrt                  hosts.deny            protocols
adjtime              hp                   pulse
aliases             idmapd.conf          purple
aliases.db          init.d               python
alsa                inittab              qemu-ga
alternatives         inputrc              qemu-kvm
anacrontab          iproute2             radvd.conf
asound.conf         ipsec.conf           ras
at.deny             ipsec.d              rc0.d
audisp              ipsec.secrets        rc1.d
audit              iscsi                rc2.d
avahi               issue                rc3.d
bash_completion.d   issue.net            rc4.d
bashrc              java                 rc5.d
binfmt.d            jvm                  rc6.d
bluetooth           jvm-common           rc.d
brltty              kdump.conf           rc.local
brltty.conf         kernel               rdma
centos-release      krb5.conf            redhat-release
centos-release-upstream krb5.conf.d          request-key.conf
chkconfig.d         ksmtuned.conf        request-key.d
chrony.conf         ld.so.cache          resolv.conf
chrony.keys         ld.so.conf           resolv.conf.save
cifs-utils          ld.so.conf.d         rpc
cron.d              libaudit.conf        rpm
cron.daily          libblockdev          rsyncd.conf
cron.deny           libibverbs.d         rsyslog.conf
cron.hourly         libnl                 rsyslog.d
cron.monthly        libpaper.d           rwtab
crontab             libreport            rwtab.d
cron.weekly         libuser.conf         samba
crypttab           libvirt              sane.d
csh.cshrc           locale.conf          sasl2
csh.login           localtime            scl
```

- **ls -al**

-a - used to show hidden

-l – used to display the permission

So ls -al will display both hidden file as well as their permissions.



```
jatin@localhost:~$ cd /etc
[jatin@localhost etc]$ ls -al
total 1372
drwxr-xr-x. 139 root root    8192 Oct 14 18:24 .
dr-xr-xr-x.  17 root root    224 Oct 13 16:48 ..
drwxr-xr-x.   3 root root    101 Oct 13 16:42 abrt
-rw-r--r--.   1 root root     16 Oct 13 16:48 adjtime
-rw-r--r--.   1 root root   1529 Apr  1 2020 aliases
-rw-r--r--.   1 root root  12288 Oct 13 16:46 aliases.db
drwxr-xr-x.   3 root root     65 Oct 13 16:43 alsa
drwxr-xr-x.   2 root root   4096 Oct 13 17:23 alternatives
-rw-r-----.  1 root root    541 Jan 13 2022 anacrontab
-rw-r--r--.   1 root root     55 Aug  8 2019 asound.conf
-rw-r--r--.   1 root root      1 May 18 21:24 at.deny
drwxr-xr-x.   3 root root     43 Oct 13 16:42 audisp
drwxr-xr-x.   3 root root     83 Oct 13 16:46 audit
drwxr-xr-x.   4 root root     71 Oct 13 16:43 avahi
drwxr-xr-x.   2 root root   4096 Oct 13 17:21 bash_completion.d
-rw-r--r--.   1 root root   2853 Apr  1 2020 bashrc
drwxr-xr-x.   2 root root      6 Sep  1 20:27 binfmt.d
drwxr-xr-x.   2 root root     23 Oct 13 16:42 bluetooth
drwxr-xr-x.   2 root root  12288 Oct 13 16:42 brltty
-rw-r--r--.   1 root root   21929 Apr 11 2018 brltty.conf
-rw-r--r--.   1 root root     37 Nov 23 2020 centos-release
-rw-r--r--.   1 root root     51 Nov 23 2020 centos-release-upstream
drwxr-xr-x.   2 root root      6 Oct 13 2020 chkconfig.d
-rw-r--r--.   1 root root   1108 Aug  8 2019 chrony.conf
-rw-r-----.  1 root chrony  481 Aug  8 2019 chrony.keys
drwxr-xr-x.   2 root root     26 Oct 13 17:19 cifs-utils
```

- **ls -i**

It will display index of file in file system.

```

jatin@localhost:/etc
File Edit View Search Terminal Tabs Help

jatin@localhost:/etc x jatin@localhost:/etc x [icon] v

[jatin@localhost etc]$ ls -li
34626104 abrt 2808486 mcelog
17477382 adjtime 17294025 mke2fs.conf
16777386 aliases 17433361 modprobe.d
17498350 aliases.db 1135144 modules-load.d
1614866 alsa 16777400 motd
33927986 alternatives 16777284 mtab
17521929 anacrontab 17027097 mtools.conf
17240175 asound.conf 17652241 multipath
17578604 at.deny 17404336 my.cnf
51096054 audisp 17404337 my.cnf.d
17556565 audit 18042848 nanorc
35324411 avahi 34625892 ndctl
74276 bash_completion.d 17294046 netconfig
16777387 bashrc 34583058 NetworkManager
50938570 binfmt.d 17637131 networks
51002433 bluetoath 17637166 nfs.conf
17651805 brltty 17637167 nfsmount.conf
17651806 brltty.conf 17433564 nsswitch.conf
16777385 centos-release 16888239 nsswitch.conf.bak
16777320 centos-release-upstream 51843805 ntp
50372567 chkconfig.d 17521913 numad.conf
17577654 chrony.conf 51096042 oddjob
17577656 chrony.keys 17556545 oddjobd.conf

```

- **ls -help**

It will give all the detail information about ls command and all available argument we can use with ls. We can use `-help` with any other linux command as well for its information.

```
jatin@localhost:/etc
```

File Edit View Search Terminal Tabs Help

```
jatin@localhost:/etc
```

```
jatin@localhost:/etc
```

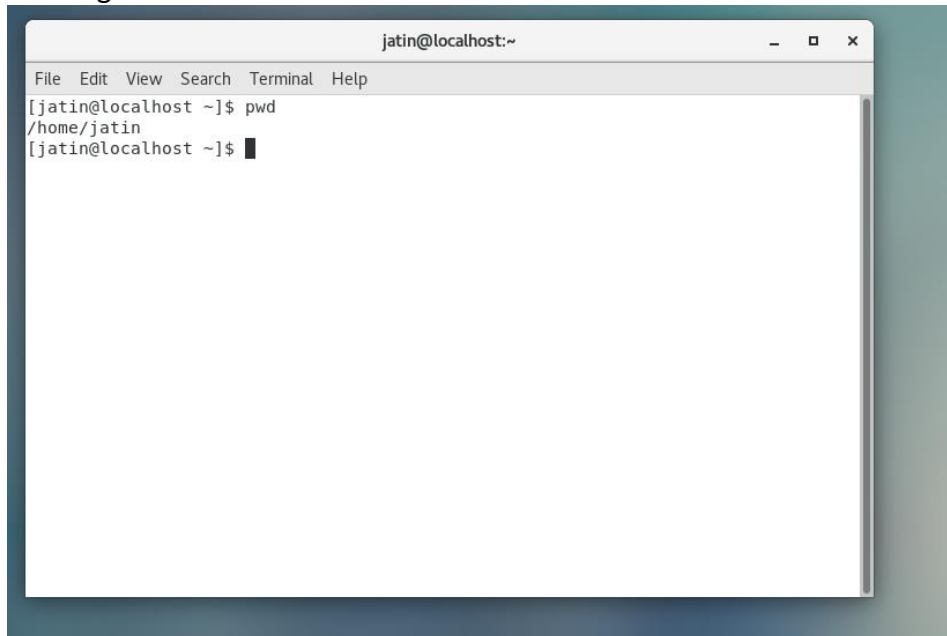
```
[jatin@localhost etc]$ ls --help
Usage: ls [OPTION]... [FILE]...
List information about the FILES (the current directory by default).
Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

Mandatory arguments to long options are mandatory for short options too.
-a, --all                do not ignore entries starting with .
-A, --almost-all        do not list implied . and ..
    --author              with -l, print the author of each file
-b, --escape             print C-style escapes for nongraphic characters
    --block-size=SIZE    scale sizes by SIZE before printing them; e.g.,
                        '--block-size=M' prints sizes in units of
                        1,048,576 bytes; see SIZE format below
-B, --ignore-backups     do not list implied entries ending with ~
-c                        with -lt: sort by, and show, ctime (time of last
                        modification of file status information);
                        with -l: show ctime and sort by name;
                        otherwise: sort by ctime, newest first
-C                        list entries by columns
    --color[=WHEN]       colorize the output; WHEN can be 'never', 'auto',
                        or 'always' (the default); more info below
-d, --directory          list directories themselves, not their contents
-D, --dired              generate output designed for Emacs' dired mode
-f                        do not sort, enable -aU, disable -ls --color
-F, --classify           append indicator (one of */=>@|) to entries
    --file-type          likewise, except do not append '*'
    --format=WORD        across -X, commas -m, horizontal -x, long -l,
                        single-column -l, verbose -l, vertical -C
    --full-time           like -l --time-style=full-iso
-g                        like -l, but do not list owner
```


Question-5

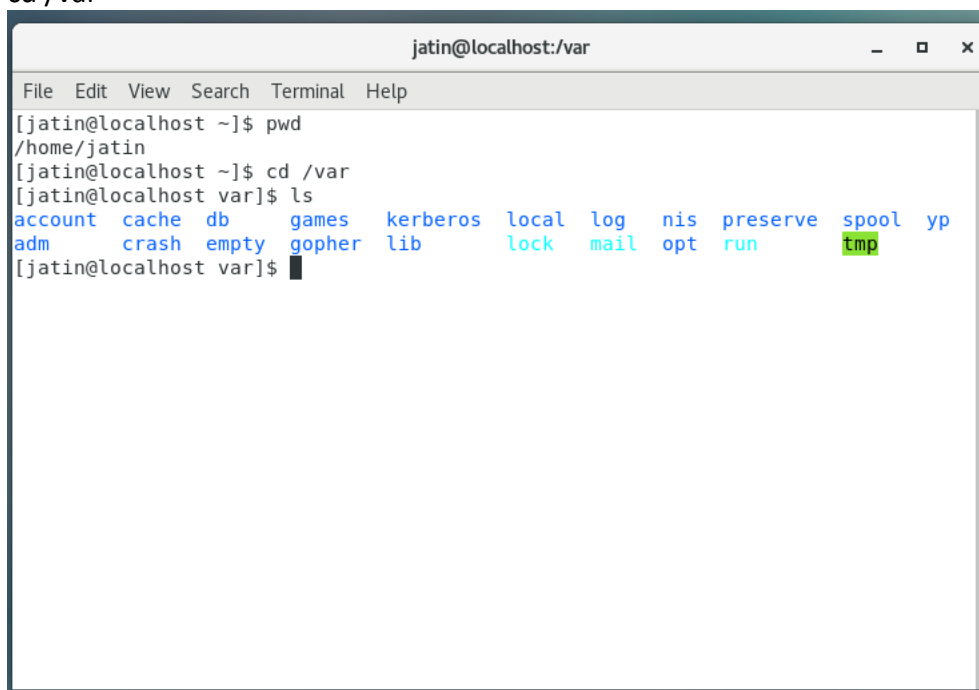
Know where you are and where you working

- **pwd**- It will display Present Working Directory i.e the directory in which currently we are working.

A terminal window titled 'jatin@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command 'pwd' being executed, which outputs '/home/jatin'. The prompt returns to '[jatin@localhost ~]\$' with a cursor.

```
jatin@localhost:~  
File Edit View Search Terminal Help  
[jatin@localhost ~]$ pwd  
/home/jatin  
[jatin@localhost ~]$
```

- **cd /var**

A terminal window titled 'jatin@localhost:/var' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows a sequence of commands: 'pwd' (output: '/home/jatin'), 'cd /var', and 'ls'. The 'ls' command outputs a list of directories in two rows. The 'tmp' directory is highlighted in green. The prompt returns to '[jatin@localhost var]\$' with a cursor.

```
jatin@localhost:/var  
File Edit View Search Terminal Help  
[jatin@localhost ~]$ pwd  
/home/jatin  
[jatin@localhost ~]$ cd /var  
[jatin@localhost var]$ ls  
account  cache  db      games  kerberos  local  log   nis   preserve  spool  yp  
adm      crash  empty  gopher  lib       lock   mail  opt   run       tmp  
[jatin@localhost var]$
```

