



Basic Linux Commands Assignments

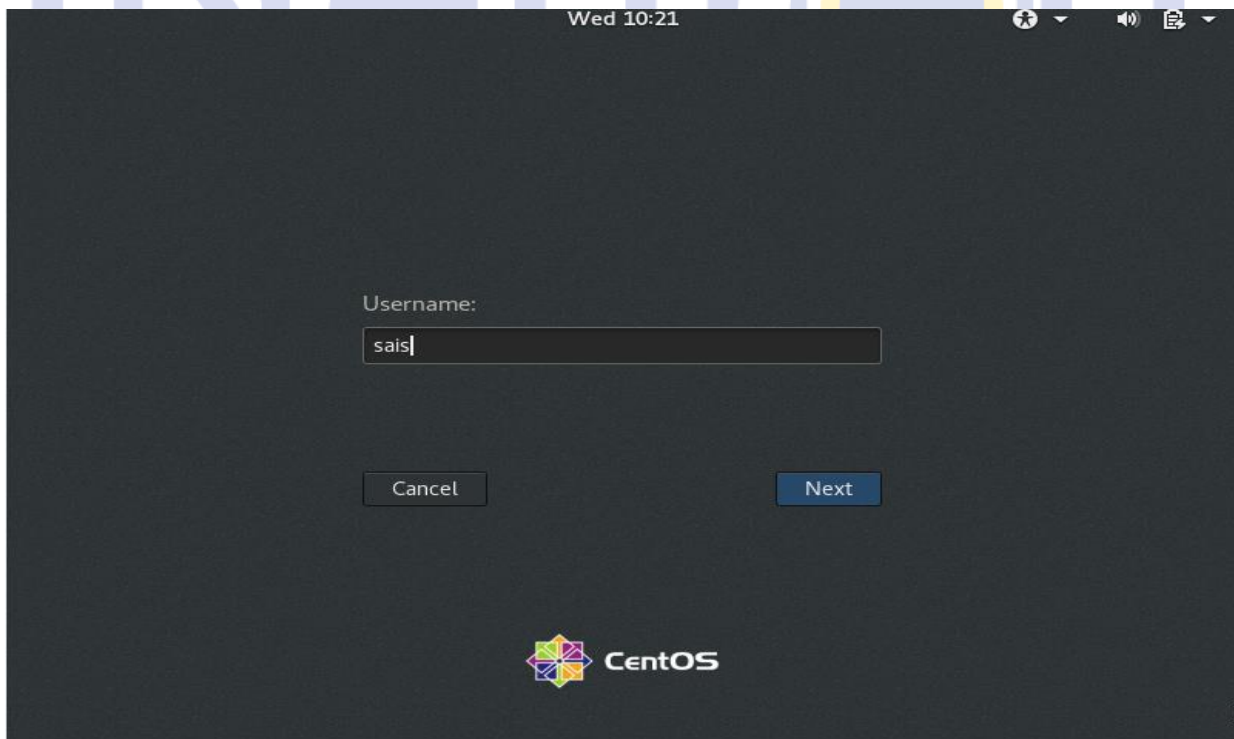
Assignment-1

Connect and disconnect with login Access

- What happens when you login a non-existent users or username?
 - Provide Screenshot and What you understand, explain in short brief?

Ans: When we enter the username that we have not registered at time of OS burning to virtual box, the name got accepted. After that when we enter some random password to that username it showed” sorry that did not work. Try again”. But when I try to enter root as username while login it gave me root privileges.

We cannot enter the system without valid username and password.





Assignment-2

Password changing

- Login into your account and then change password?
 - Change your password into *IneuR0n#42* and hit the Enter key
 - Explain what happen and give screenshot?

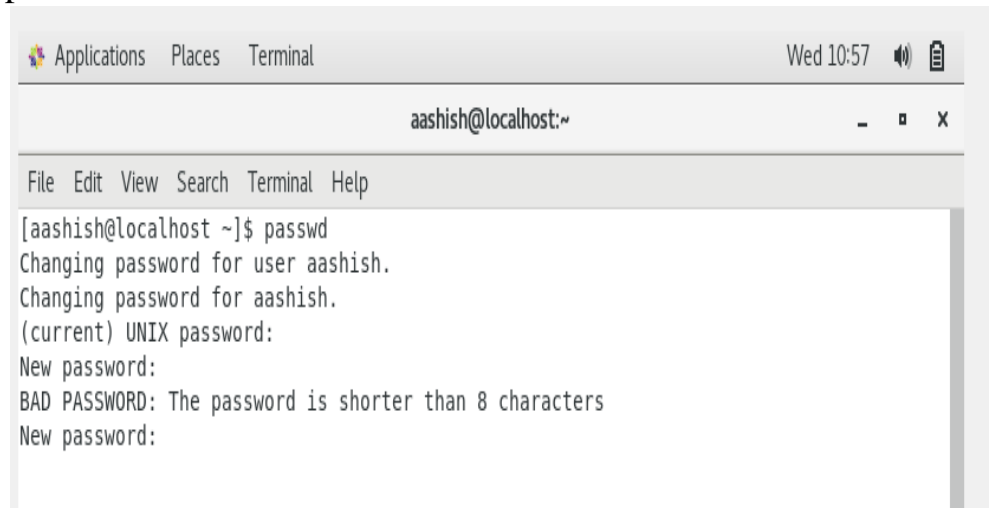
I have used “passwd” command to change my password to above mentioned and it changed.

A screenshot of a terminal window. The title bar says 'Applications Places Terminal' and 'Wed 10:55'. The terminal prompt is 'aashish@localhost:~'. The user has entered the command 'passwd'. The output shows: 'Changing password for user aashish.', 'Changing password for aashish.', '(current) UNIX password:', 'New password:', 'Retype new password:', 'passwd: all authentication tokens updated successfully.', and the prompt '[aashish@localhost ~]\$'.

- **Try again to change password but use like password *1234* or *abcd***

- **Explain what happen and give screenshot?**

I think we cannot change the password to less secure password.

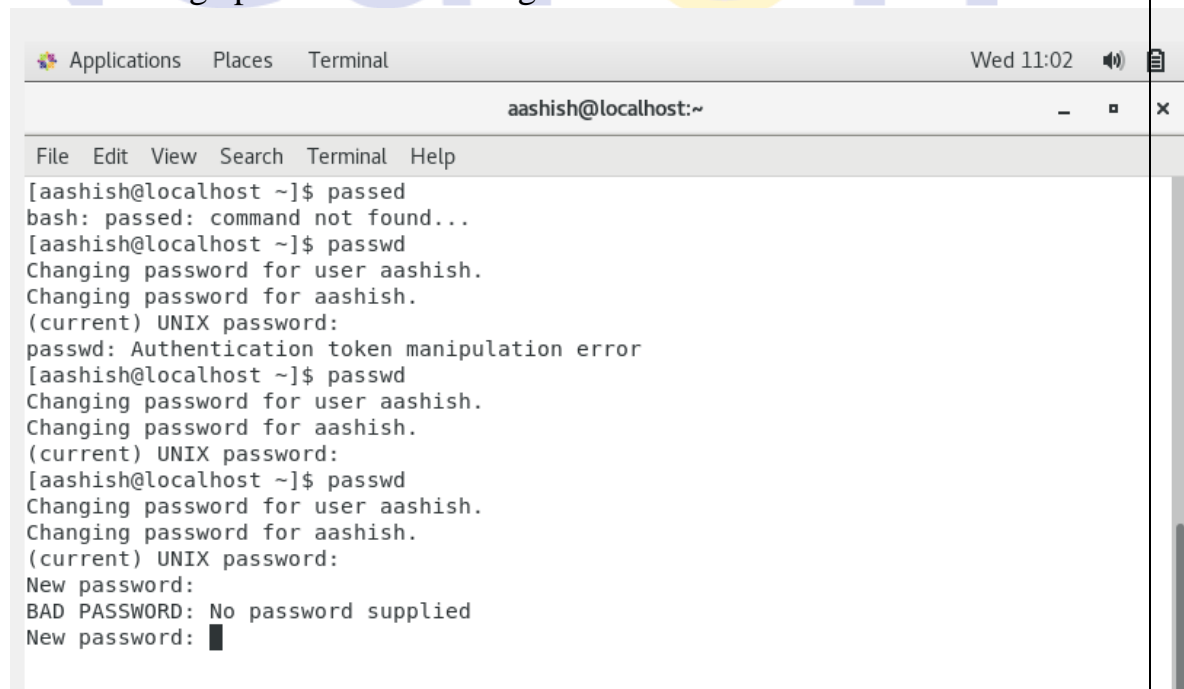


```
aashish@localhost:~$ passwd
Changing password for user aashish.
Changing password for aashish.
(current) UNIX password:
New password:
BAD PASSWORD: The password is shorter than 8 characters
New password:
```

- **Try again to change password but now don't use any password just hit Enter key**

- **Explain what happen and give screenshot?**

It was showing “Bad password: no password supplied”. So we cannot change password to nothing.



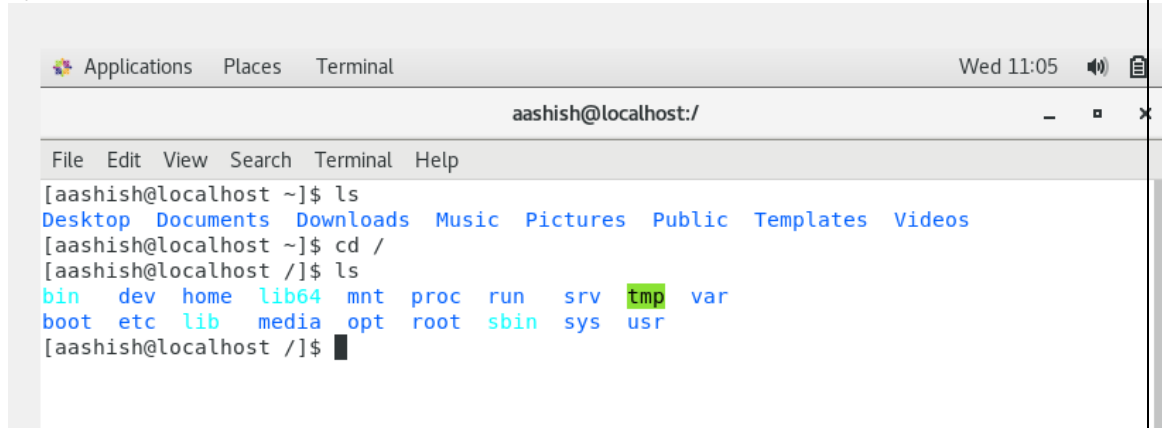
```
aashish@localhost:~$ passed
bash: passed: command not found...
[aashish@localhost ~]$ passwd
Changing password for user aashish.
Changing password for aashish.
(current) UNIX password:
passwd: Authentication token manipulation error
[aashish@localhost ~]$ passwd
Changing password for user aashish.
Changing password for aashish.
(current) UNIX password:
[aashish@localhost ~]$ passwd
Changing password for user aashish.
Changing password for aashish.
(current) UNIX password:
New password:
BAD PASSWORD: No password supplied
New password: █
```

Assignment-3

Working with Directories

- Enter the command `cd /` and then `ls` and then hit Enter key
 - Take screenshot and explain what output we got?

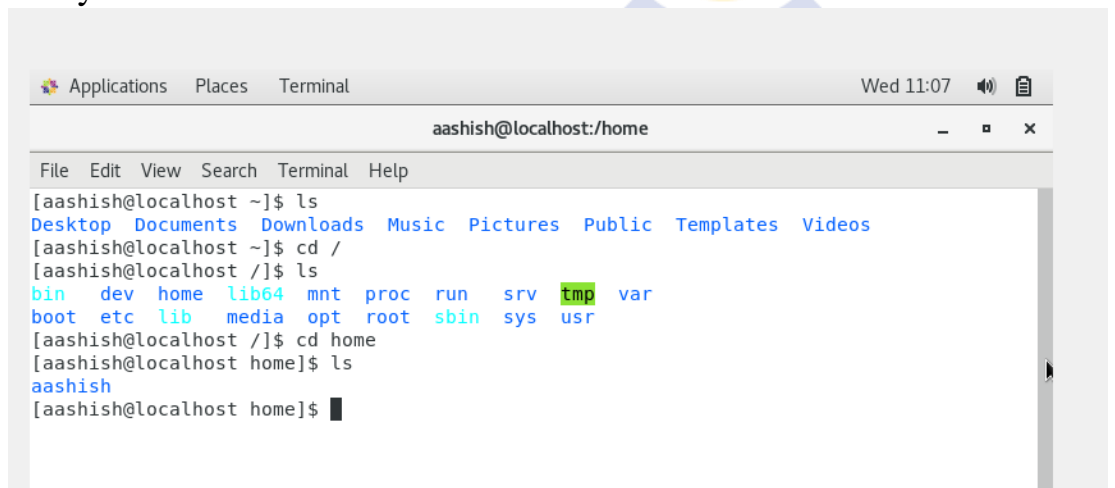
The output I got was mentioned below. This are related to the system files.



```
aashish@localhost: /  
File Edit View Search Terminal Help  
[aashish@localhost ~]$ ls  
Desktop Documents Downloads Music Pictures Public Templates Videos  
[aashish@localhost ~]$ cd /  
[aashish@localhost /]$ ls  
bin dev home lib64 mnt proc run srv tmp var  
boot etc lib media opt root sbin sys usr  
[aashish@localhost /]$
```

- Enter the command now `cd /home` and then hit Enter key
 - Do `ls`, provide screenshot and explain what is `/home` directory used for?

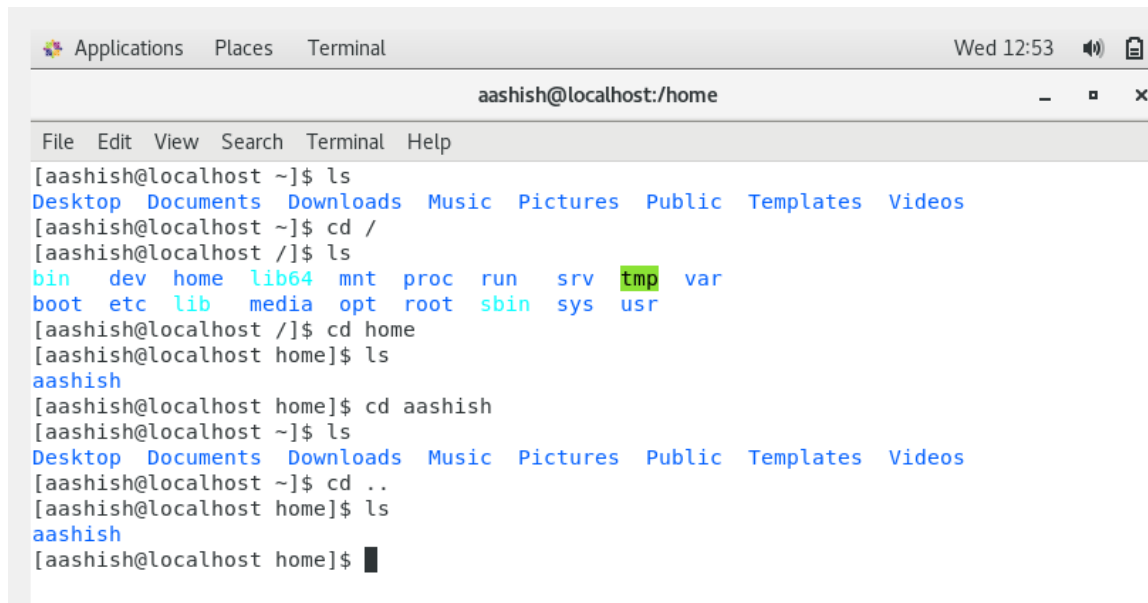
Home directory is used to store the user files that are available in the system.



```
aashish@localhost: /home  
File Edit View Search Terminal Help  
[aashish@localhost ~]$ ls  
Desktop Documents Downloads Music Pictures Public Templates Videos  
[aashish@localhost ~]$ cd /  
[aashish@localhost /]$ ls  
bin dev home lib64 mnt proc run srv tmp var  
boot etc lib media opt root sbin sys usr  
[aashish@localhost /]$ cd home  
[aashish@localhost home]$ ls  
aashish  
[aashish@localhost home]$
```

- Enter `cd ..` and hit Enter key [*Note: here we have space after cd then use double dot*]
 - Check what happen and give screenshot?
After using that “`cd ..`” command the directory went one step back.

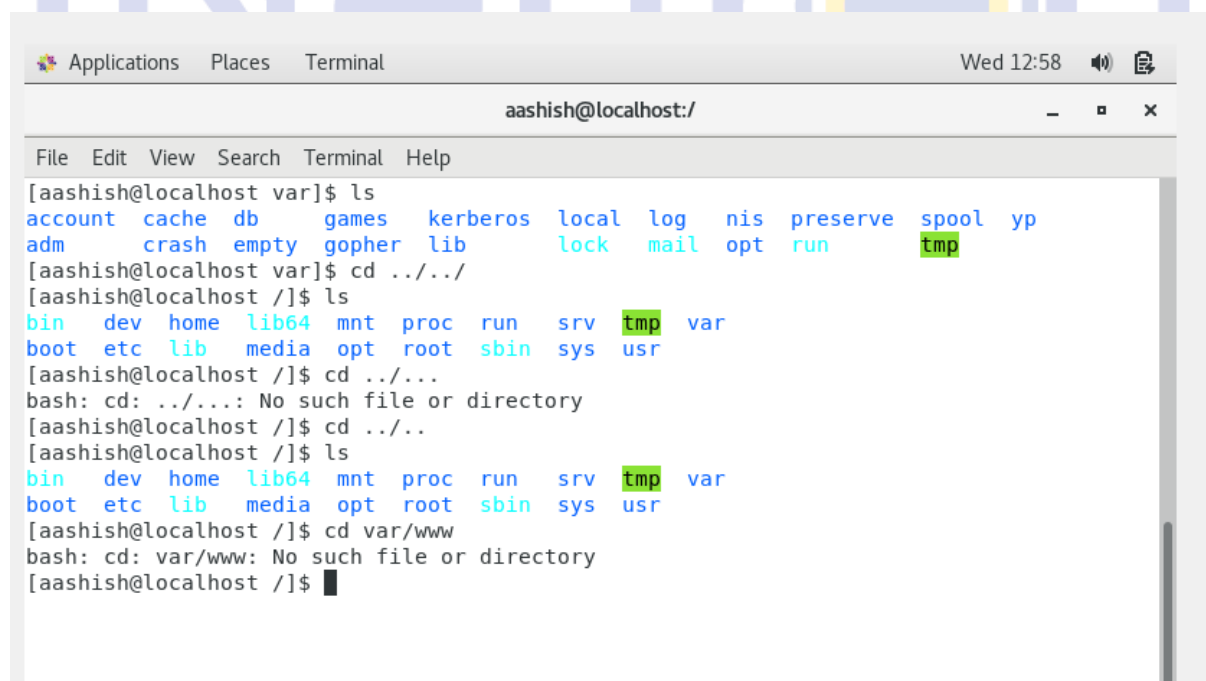
NAME: BANDE PRIYATHAM NAGA AASHISH



```
Applications Places Terminal Wed 12:53
aashish@localhost:/home
File Edit View Search Terminal Help
[aashish@localhost ~]$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
[aashish@localhost ~]$ cd /
[aashish@localhost /]$ ls
bin dev home lib64 mnt proc run srv tmp var
boot etc lib media opt root sbin sys usr
[aashish@localhost /]$ cd home
[aashish@localhost home]$ ls
aashish
[aashish@localhost home]$ cd aashish
[aashish@localhost ~]$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
[aashish@localhost ~]$ cd ..
[aashish@localhost home]$ ls
aashish
[aashish@localhost home]$
```

- Now enter `cd /var/www/html` and then type `cd` and hit Enter key
 - Explain what happen and give screenshot?

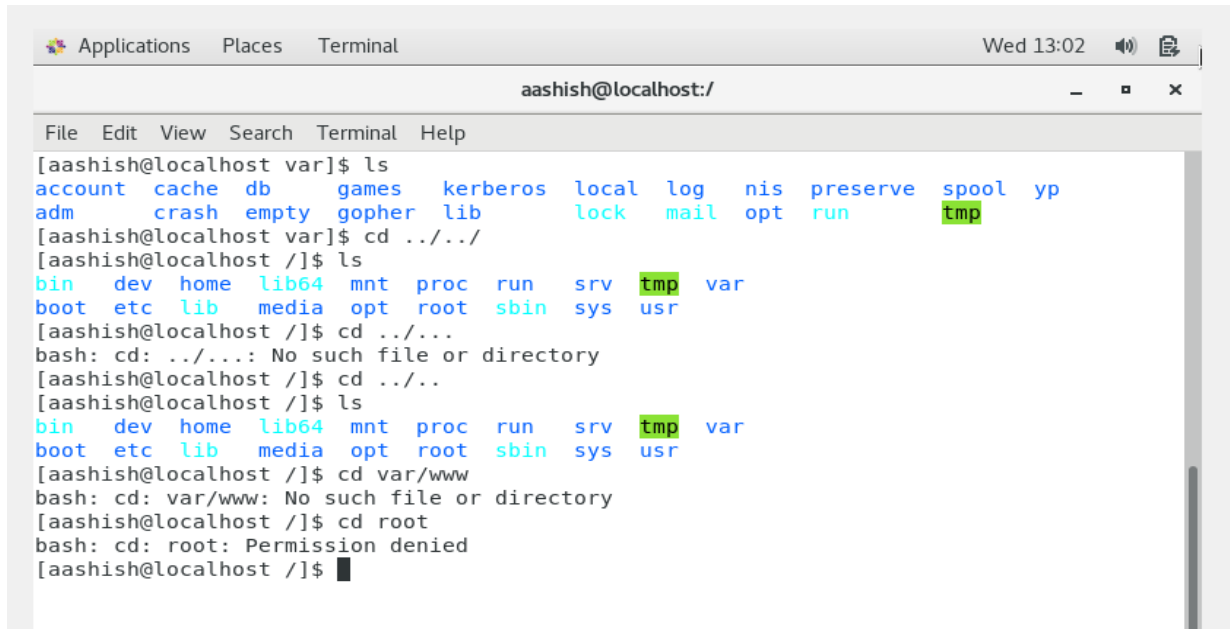
The path that was given above is not available in the Aashish user. After firing that command, we will get into the html directory it is the place where the html files will store.



```
Applications Places Terminal Wed 12:58
aashish@localhost:/
File Edit View Search Terminal Help
[aashish@localhost var]$ ls
account cache db games kerberos local log nis preserve spool yp
adm crash empty gopher lib lock mail opt run tmp
[aashish@localhost var]$ cd ../../
[aashish@localhost /]$ ls
bin dev home lib64 mnt proc run srv tmp var
boot etc lib media opt root sbin sys usr
[aashish@localhost /]$ cd ../../
bash: cd: ../../: No such file or directory
[aashish@localhost /]$ cd ../../
[aashish@localhost /]$ ls
bin dev home lib64 mnt proc run srv tmp var
boot etc lib media opt root sbin sys usr
[aashish@localhost /]$ cd var/www
bash: cd: var/www: No such file or directory
[aashish@localhost /]$
```

- Now type `cd /root` and then hit Enter key
 - Do `ls`, check any output we have on screen if yes then take screenshot?

Ans: As we are not the root user, we do not have the permission to access the root directory.

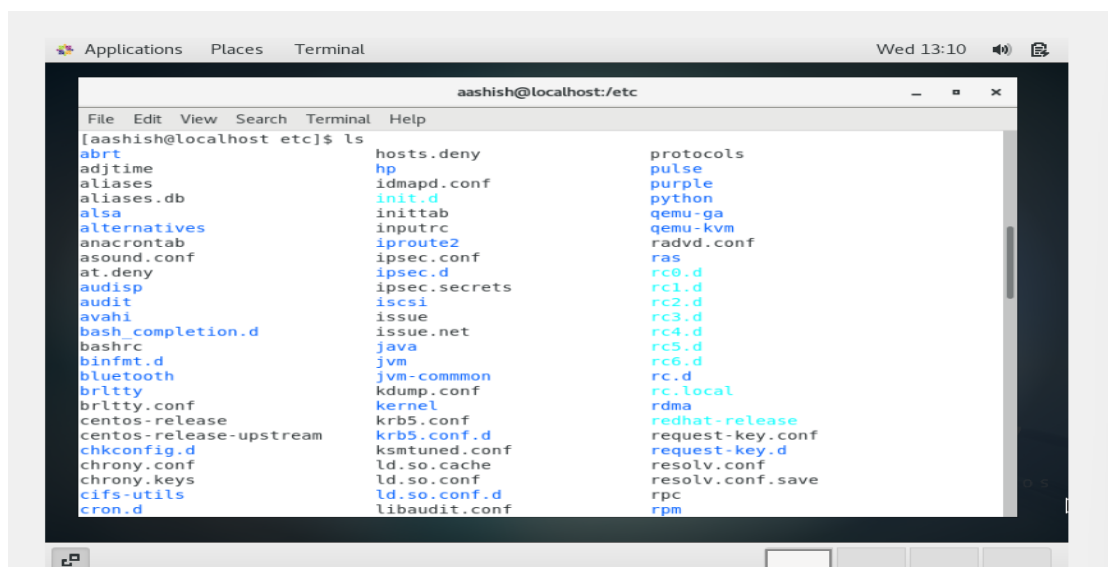


```
[aashish@localhost var]$ ls
account  cache  db      games  kerberos  local  log  nis  preserve  spool  yp
adm      crash  empty  gopher  lib       lock  mail  opt  run      tmp
[aashish@localhost var]$ cd ../../
[aashish@localhost /]$ ls
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var
boot  etc  lib  media  opt  root  sbin  sys  usr
[aashish@localhost /]$ cd ../../
bash: cd: ../../: No such file or directory
[aashish@localhost /]$ cd ../../../
[aashish@localhost /]$ ls
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var
boot  etc  lib  media  opt  root  sbin  sys  usr
[aashish@localhost /]$ cd var/www
bash: cd: var/www: No such file or directory
[aashish@localhost /]$ cd root
bash: cd: root: Permission denied
[aashish@localhost /]$
```

Assignment-4

Working with File Listing

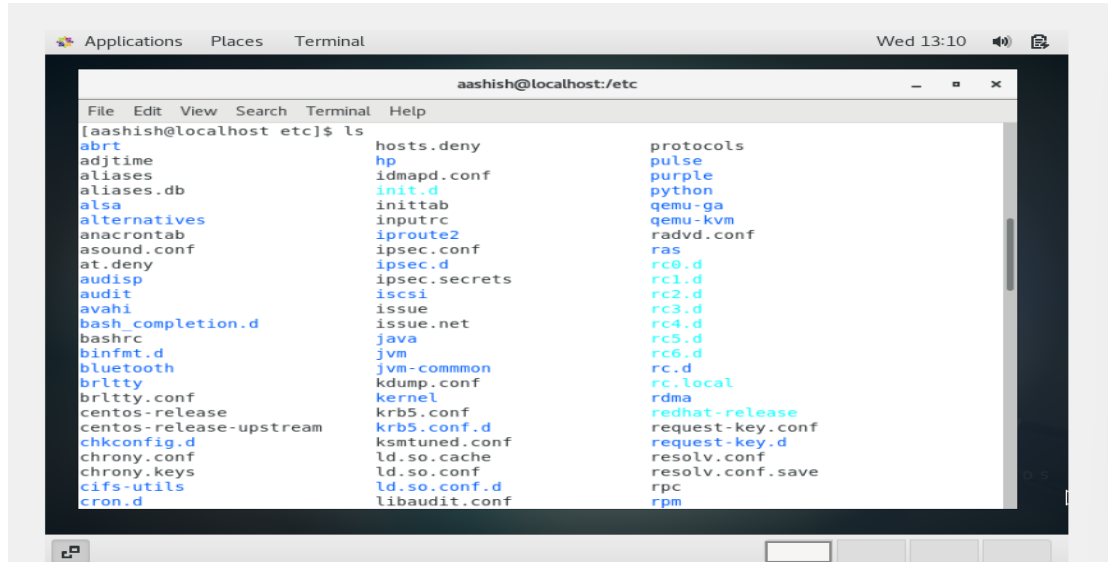
- Go to `cd /etc` and type `ls`
 - Take screenshot and explain what files you have seeing?
I can see files related to the etc with contains some config files and different folders with different colours.



```
[aashish@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
audit                ipsec.secrets        rc1.d
avahi                iscsi                rc2.d
bash_completion.d    issue                rc3.d
bashrc               issue.net            rc4.d
binfmt.d             java                 rc5.d
bluetooth            jvm                  rc6.d
brltty               jvm-common           rc.d
brltty.conf          kdump.conf           rc.local
centos-release       kernel               rdma
centos-release-upstream  krb5.conf           redhat-release
chkconfig.d          krb5.conf.d          request-key.conf
chrony.conf          kmsu.conf            request-key.d
chrony.keys          ld.so.cache          resolv.conf
cifs-utils           ld.so.conf           resolv.conf.save
cron.d               ld.so.conf.d         rpc
```

- Take screenshot and explain what different output you found compare to previous command you used?

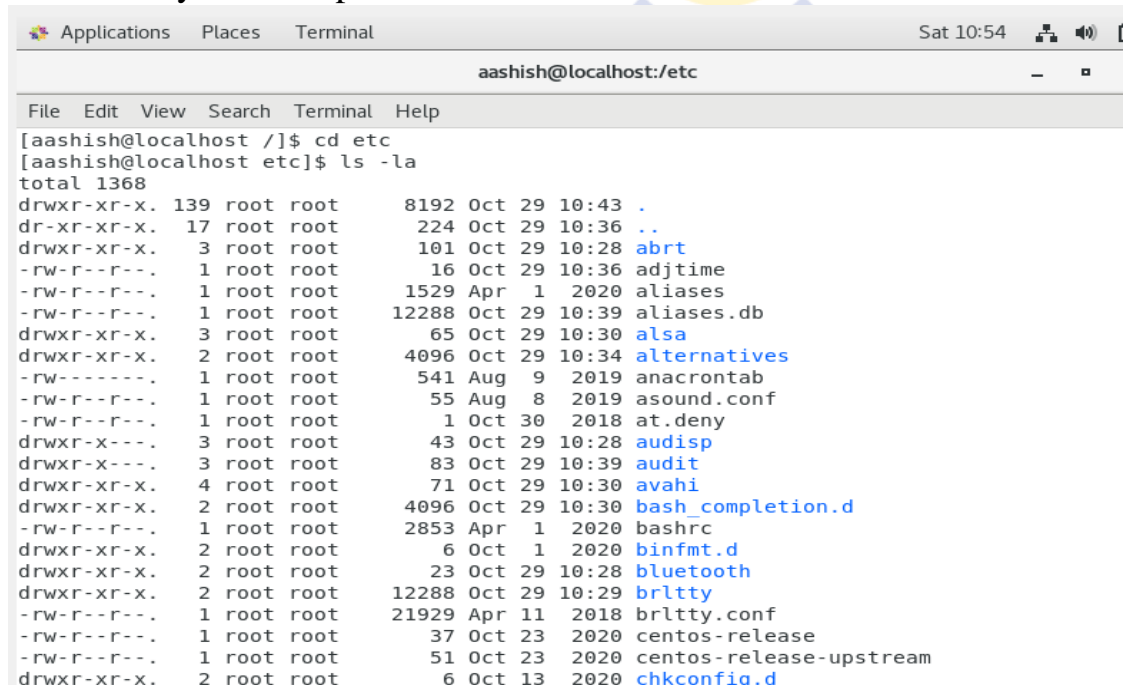
Ans: The difference between the two outputs were the files that contain in different directory.



```
aashish@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
audit            ipsec.secrets  rc1.d
audisp           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
```

- Then type `ls -al` and hit Enter key
 - Take screenshot and explain what new file or directory you found?

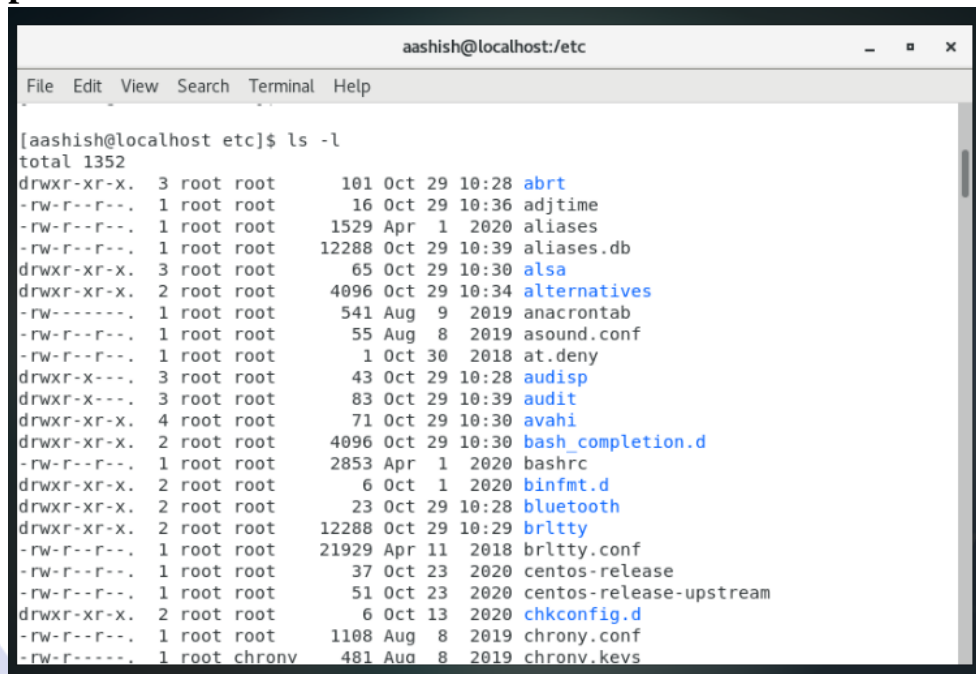
Ans: It showed all the files including hidden files that contains in etc directory with the permissions of the files.



```
aashish@localhost:/etc$ ls -la
total 1368
drwxr-xr-x. 139 root root    8192 Oct 29 10:43 .
dr-xr-xr-x. 17 root root    224 Oct 29 10:36 ..
drwxr-xr-x. 3 root root    101 Oct 29 10:28 abrt
-rw-r--r--. 1 root root    16 Oct 29 10:36 adjtime
-rw-r--r--. 1 root root   1529 Apr 1 2020 aliases
-rw-r--r--. 1 root root  12288 Oct 29 10:39 aliases.db
drwxr-xr-x. 3 root root    65 Oct 29 10:30 alsa
drwxr-xr-x. 2 root root   4096 Oct 29 10:34 alternatives
-rw-r--r--. 1 root root    541 Aug 9 2019 anacrontab
-rw-r--r--. 1 root root    55 Aug 8 2019 asound.conf
-rw-r--r--. 1 root root     1 Oct 30 2018 at.deny
drwxr-xr-x. 3 root root    43 Oct 29 10:28 audisp
drwxr-xr-x. 3 root root    83 Oct 29 10:39 audit
drwxr-xr-x. 4 root root    71 Oct 29 10:30 avahi
drwxr-xr-x. 2 root root   4096 Oct 29 10:30 bash_completion.d
-rw-r--r--. 1 root root  2853 Apr 1 2020 bashrc
drwxr-xr-x. 2 root root     6 Oct 1 2020 binfmt.d
drwxr-xr-x. 2 root root    23 Oct 29 10:28 bluetooth
drwxr-xr-x. 2 root root  12288 Oct 29 10:29 brltty
-rw-r--r--. 1 root root  21929 Apr 11 2018 brltty.conf
-rw-r--r--. 1 root root    37 Oct 23 2020 centos-release
-rw-r--r--. 1 root root    51 Oct 23 2020 centos-release-upstream
drwxr-xr-x. 2 root root     6 Oct 13 2020 chkconfig.d
```


- Then use `ls -i` and hit Enter key
 - Now see what different output it shows and take screenshot?

Ans : it showed all the files without hidden files with permissions of files

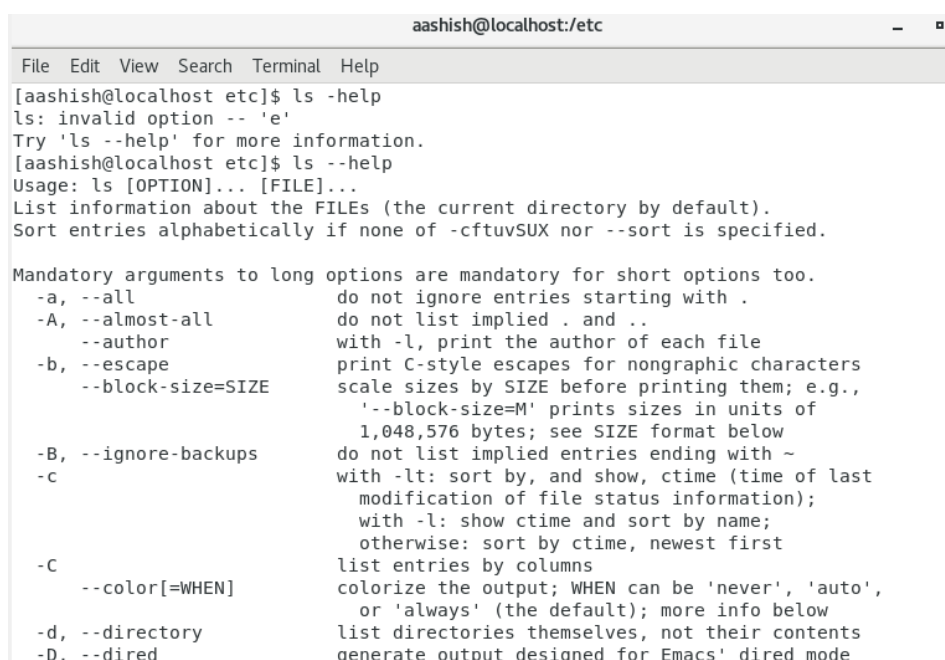


```
aashish@localhost:/etc
File Edit View Search Terminal Help

[aashish@localhost etc]$ ls -l
total 1352
drwxr-xr-x. 3 root root 101 Oct 29 10:28 abrt
-rw-r--r--. 1 root root 16 Oct 29 10:36 adjtime
-rw-r--r--. 1 root root 1529 Apr 1 2020 aliases
-rw-r--r--. 1 root root 12288 Oct 29 10:39 aliases.db
drwxr-xr-x. 3 root root 65 Oct 29 10:30 alsa
drwxr-xr-x. 2 root root 4096 Oct 29 10:34 alternatives
-rw-r--r--. 1 root root 541 Aug 9 2019 anacrontab
-rw-r--r--. 1 root root 55 Aug 8 2019 asound.conf
-rw-r--r--. 1 root root 1 Oct 30 2018 at.deny
drwxr-xr-x. 3 root root 43 Oct 29 10:28 audisp
drwxr-xr-x. 3 root root 83 Oct 29 10:39 audit
drwxr-xr-x. 4 root root 71 Oct 29 10:30 avahi
drwxr-xr-x. 2 root root 4096 Oct 29 10:30 bash_completion.d
-rw-r--r--. 1 root root 2853 Apr 1 2020 bashrc
drwxr-xr-x. 2 root root 6 Oct 1 2020 binfmt.d
drwxr-xr-x. 2 root root 23 Oct 29 10:28 bluetooth
drwxr-xr-x. 2 root root 12288 Oct 29 10:29 brltty
-rw-r--r--. 1 root root 21929 Apr 11 2018 brltty.conf
-rw-r--r--. 1 root root 37 Oct 23 2020 centos-release
-rw-r--r--. 1 root root 51 Oct 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--r--. 1 root chrony 481 Aug 8 2019 chrony.keys
```

- Then use `ls --help` and see other options about `ls` command
 - Explore it and try with other attribute we can use with `ls` command

Ans : it gives us a idea of how to use the `ls` command with different arguments.



```
aashish@localhost:/etc
File Edit View Search Terminal Help

[aashish@localhost etc]$ ls --help
ls: invalid option -- 'e'
Try 'ls --help' for more information.
[aashish@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.

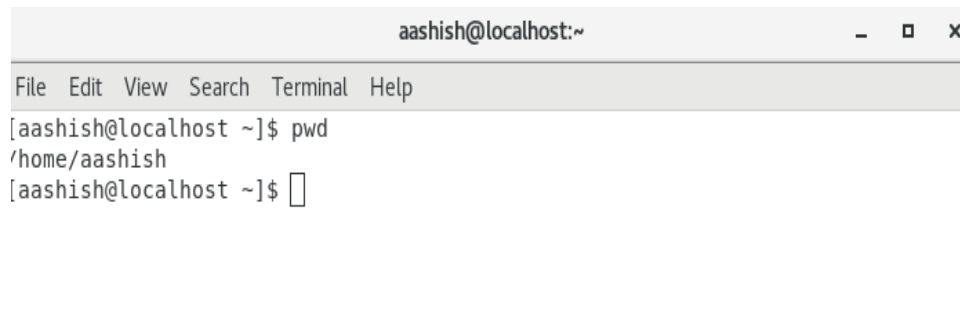
Mandatory arguments to long options are mandatory for short options too.
  -a, --all                do not ignore entries starting with .
  -A, --almost-all        do not list implied . and ..
      --author              with -l, print the author of each file
  -b, --escape             print C-style 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
```


Assignment-5

Know where you are and where you working

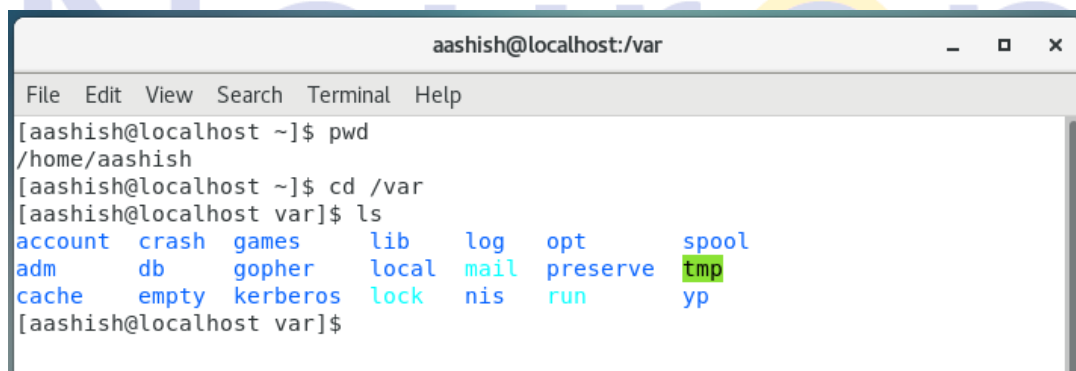
Here we use `pwd`, `cd` and `ls` as combine task to understand where you working on terminal and how you can switch from one directory to another one.

- **Open terminal after restart the linux**
 - **Check which location you working, type `pwd` and take screenshot**



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

- **Now use `cd /var` and hit Enter key**
 - **Do `ls`, and see what output comes, give screenshot?**



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

- **Do explore other help options of each command to learn more other things we can do with these commands**

Ans: yes done.