

Assignment

Assignment Date:09-10-2022

Submitted by:Govarthan A(govasana07@gmail.com)

Assignment 1: Update the centos machine (rough note assignment)

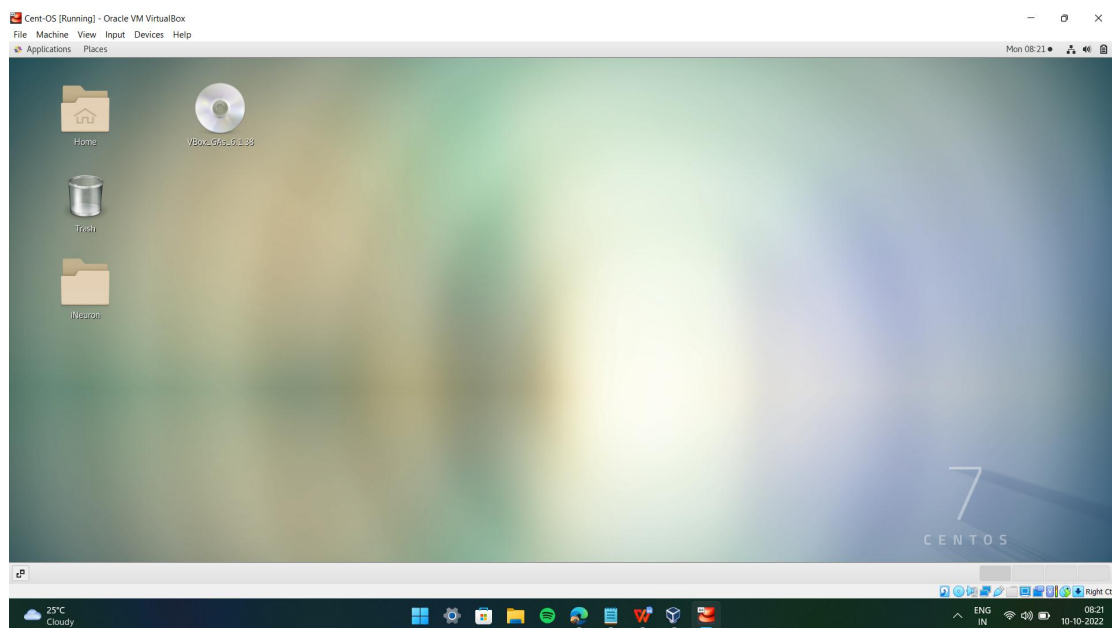
- In order to update linux machine user should be Super User
- By using the following **su root** we can become root user then run **yum -y update** to update the cent os machine

Assignment 2: Install all dependencies to make cent os ready for full screen mode (rough note assignment)

- Did **yum update** initially once everything is updated I ran the below command

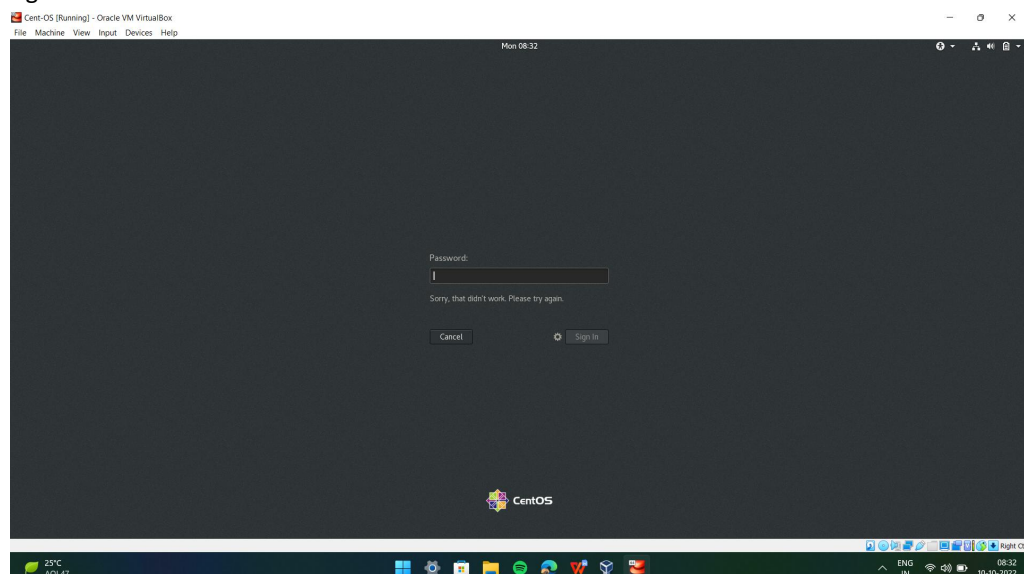
```
yum install dkms gcc make kernel-devel bzip2 binutils patch libgomp glibc-headers glibc-devel kernel-headers -y
```

- Once above command ran successfully I went to mount the **Guest Addition CD image** under devices drop down of virtual box
- Then I restarted the VM once restarted under view Drop down I selected Full screen then it went to full screen mode like below



Assignment 3: login a non-existent users or username

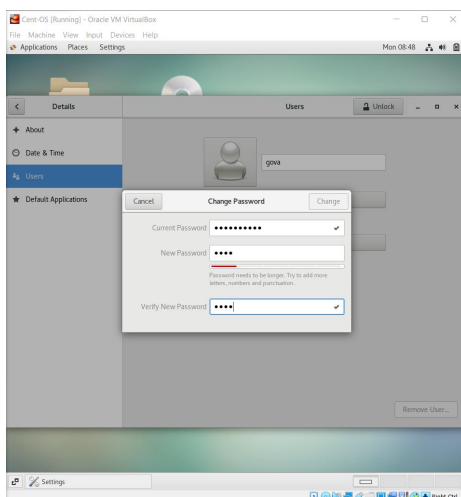
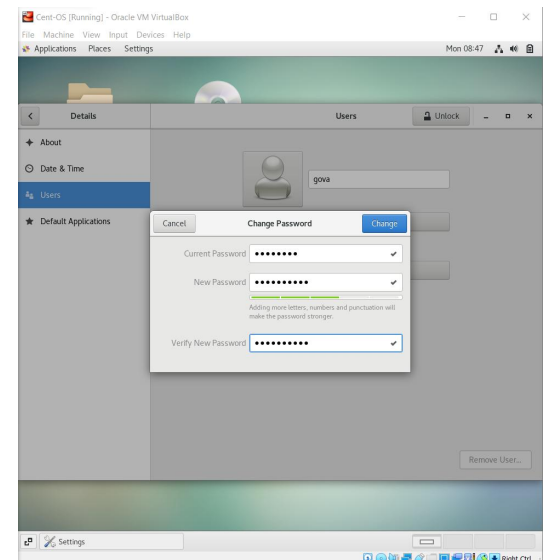
- So I logged out from the user I created and tried different user name and password I got the following error



-- Because we don't have that user in the cent os created so it throwing this error while logging in with some non existent username and password.

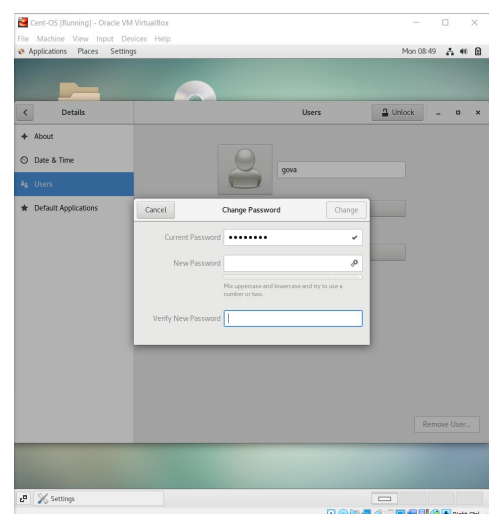
Assignment 4: Password changing

-- Like mentioned in Assignment document initially I changed the password to (**IneuRON#42**)
i able to add this password I'm getting change button enabled once I entered this password and also I can able to use them to login



--Secondly I tried with this password (**1234 & abcd**) it showing me this is weak password and not able to change

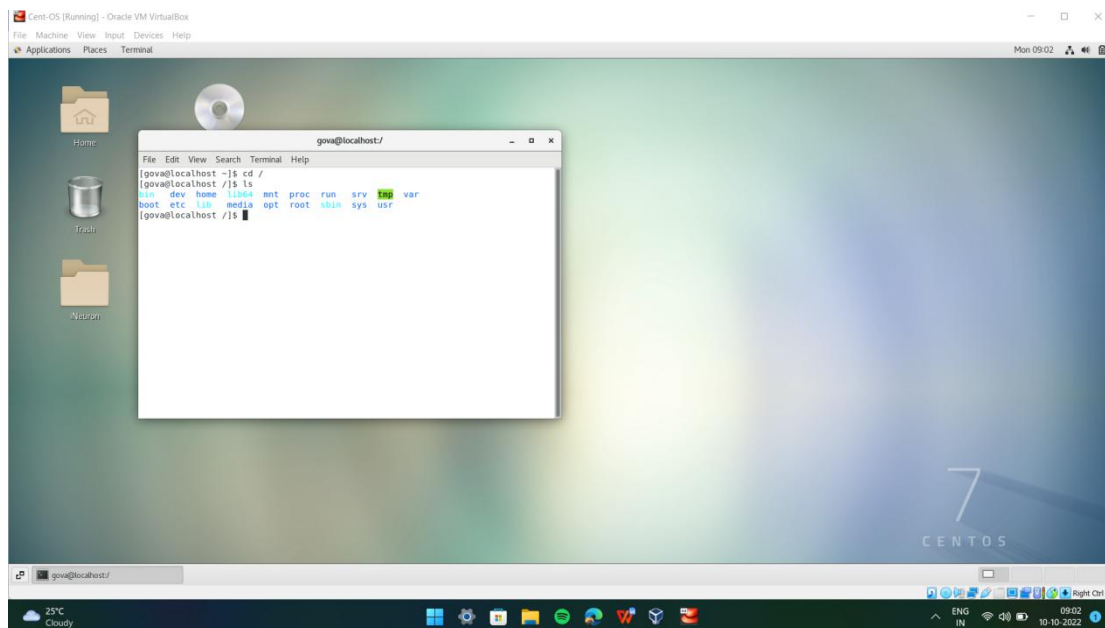
--Like mentioned in assignment document lastly we have to barely hit enter in new password text field
--nothing is happening there it is asking me to enter the password also change button is disabled



Assignment 5: Working with Directories

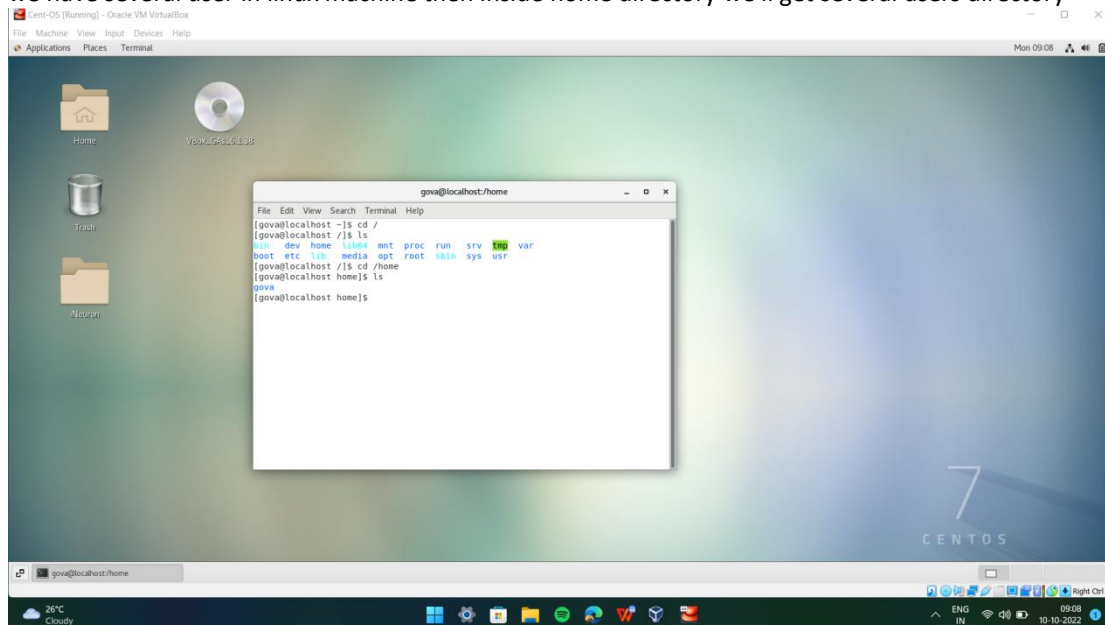
1. Enter the command **cd /** and then **ls** and then hit **Enter** key

-- Since it is in os installed directory it is showing all folder that os installed directory has



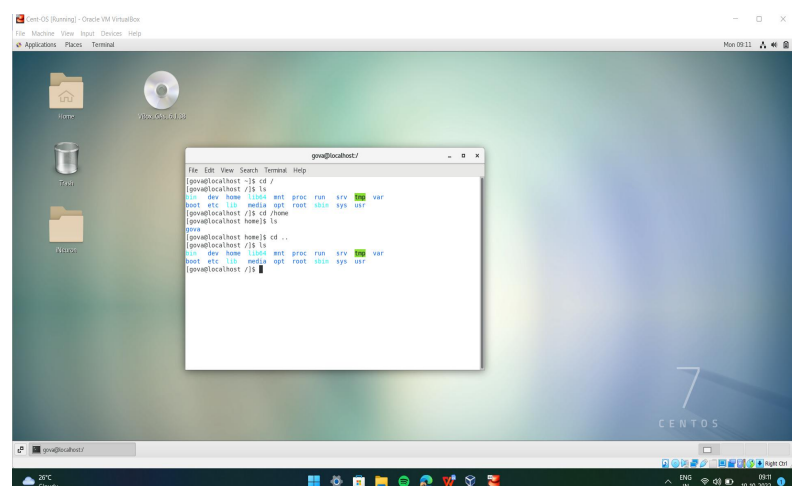
2. Enter the command now **cd /home** and then hit **Enter** key

--Also did **ls** command it is showing user name, because home directory will have all users directory if we have several user in linux machine then inside home directory we ll get several users directory



3. Enter **cd ..** and hit **Enter** key

--So it is moved to os installed directory



4. Now enter **cd /var/www/html** and then type **cd** and hit **Enter** key
-- I ran the first command **cd /var/www/html** it showing error like there is no such directory
And I ran **cd** command it moved to user directory which is home directory

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

5. Now type **cd /root** and then hit **Enter** key
-- I ran the command **cd /root** it showing permission because I'm not a super user

```
gova@localhost:~  
File Edit View Search Terminal Help  
[gova@localhost ~]$ cd /  
[gova@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot  etc  lib  media  opt  root  sbin  sys  usr  
[gova@localhost /]$ cd /home  
[gova@localhost home]$ ls  
gova  
[gova@localhost home]$ cd ..  
[gova@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot  etc  lib  media  opt  root  sbin  sys  usr  
[gova@localhost /]$ cd /var/www/html  
bash: cd: /var/www/html: No such file or directory  
[gova@localhost /]$ cd  
[gova@localhost ~]$ ls  
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos  
[gova@localhost ~]$ cd /root  
bash: cd: /root: Permission denied  
[gova@localhost ~]$
```

--in order to become as a super user I ran **su root** and went to **cd /root** and listed the content it has using **ls** command

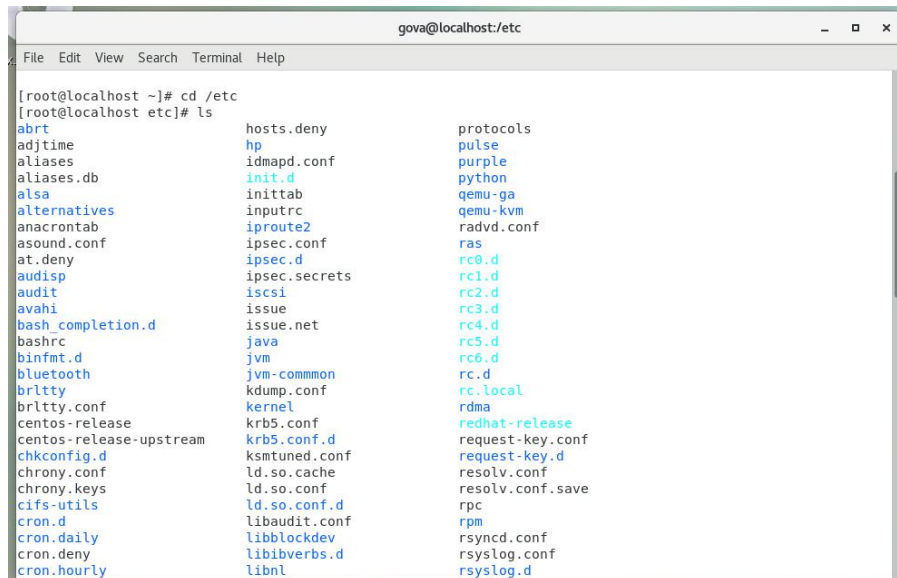
```
gova@localhost:~  
File Edit View Search Terminal Help  
boot  etc  lib  media  opt  root  sbin  sys  usr  
[gova@localhost /]$ cd /home  
[gova@localhost home]$ ls  
gova  
[gova@localhost home]$ cd ..  
[gova@localhost /]$ ls  
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var  
boot  etc  lib  media  opt  root  sbin  sys  usr  
[gova@localhost /]$ cd /var/www/html  
bash: cd: /var/www/html: No such file or directory  
[gova@localhost /]$ cd  
[gova@localhost ~]$ ls  
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos  
[gova@localhost ~]$ cd /root  
bash: cd: /root: Permission denied  
[gova@localhost ~]$ sudo cd /root  
[sudo] password for gova:  
gova is not in the sudoers file. This incident will be reported.  
[gova@localhost ~]$ su root  
Password:  
[root@localhost gova]# cd /root  
[root@localhost ~]# ls  
anaconda-ks.cfg  initial-setup-ks.cfg  
[root@localhost ~]#
```

Assignment 6: Working with File Listing

1. Go to `cd /etc` and type `ls`

--So I went to etc directory and did `ls` command it is showing me n number of files located in etc directory

--Most of the linux configuration file will be located in etc directory only so in this directory user can modify the config file of particular package based on the requirement

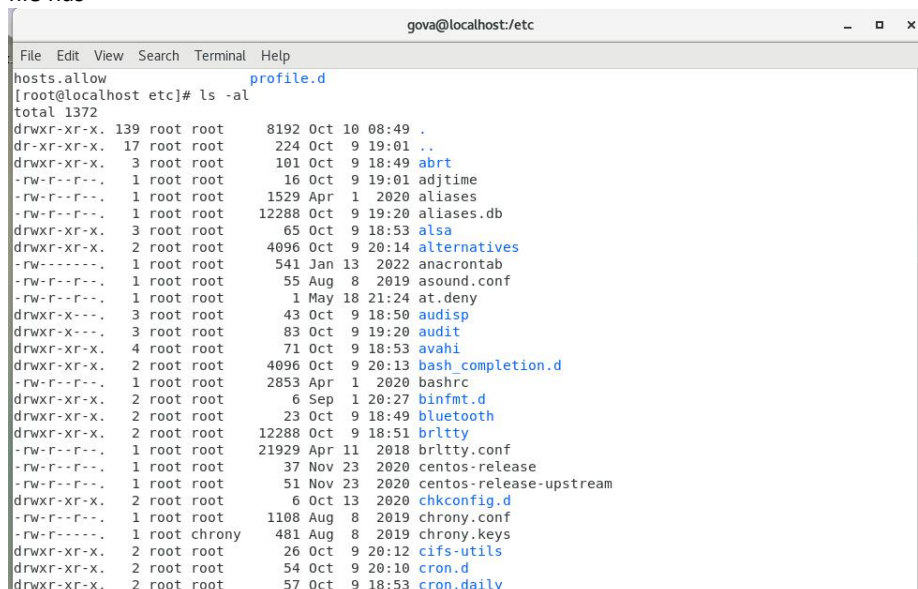


```
gova@localhost:etc
File Edit View Search Terminal Help

[root@localhost ~]# cd /etc
[root@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               iscsci              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          ksmtd.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             libverbs.d           rsyslog.conf
cron.hourly           libnl                rsyslog.d
```

2. Then type `ls -al` and hit **Enter** key

-- I ran the `ls -al` command in the etc directory then it is showing me the permission levels that each file has

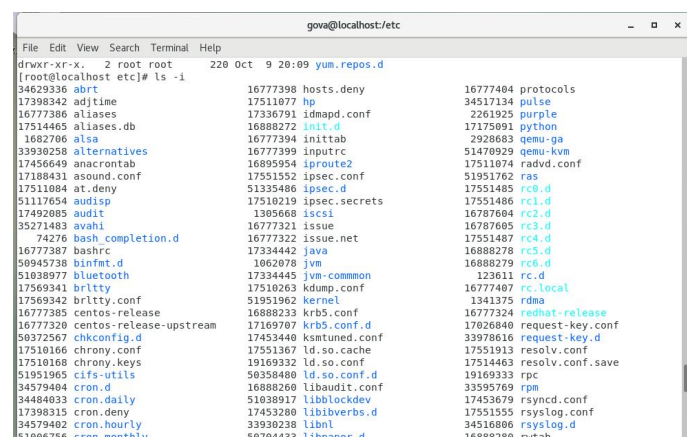


```
gova@localhost:/etc
File Edit View Search Terminal Help

[root@localhost etc]# ls -al
total 1372
drwxr-xr-x. 139 root root      8192 Oct 10 08:49 .
dr-xr-xr-x.  17 root root      224 Oct  9 19:01 ..
drwxr-xr-x.   3 root root      101 Oct  9 18:49 abrt
-rw-r--r--.   1 root root       16 Oct  9 19:01 adjtime
-rw-r--r--.   1 root root    1529 Apr  1 2020 aliases
-rw-r--r--.   1 root root   12288 Oct  9 19:20 aliases.db
drwxr-xr-x.   3 root root       65 Oct  9 18:53 alsa
drwxr-xr-x.   2 root root    4096 Oct  9 20:14 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  9 18:50 audisp
drwxr-xr-x.   3 root root       83 Oct  9 19:20 audit
drwxr-xr-x.   4 root root       71 Oct  9 18:53 avahi
drwxr-xr-x.   2 root root    4096 Oct  9 20:13 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  9 18:49 bluetooth
drwxr-xr-x.   2 root root   12288 Oct  9 18:51 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  9 20:12 cifs-utils
drwxr-xr-x.   2 root root       54 Oct  9 20:10 cron.d
drwxr-xr-x.   2 root root       57 Oct  9 18:53 cron.daily
```

3. Then use `ls -li` and hit **Enter** key

--Once I ran `ls -li` it showing me the index number of each file

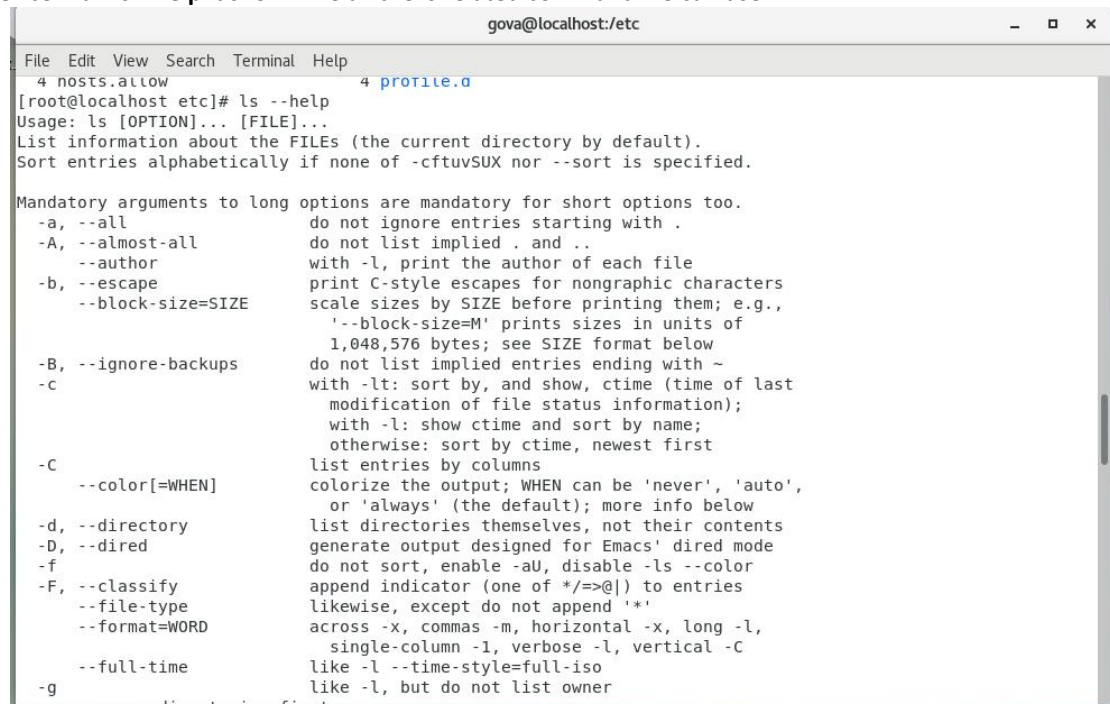


```
gova@localhost:etc
File Edit View Search Terminal Help

drwxr-xr-x. 2 root root      228 Oct  9 20:09 yum.repos.d
[root@localhost etc]# ls -li
16777398 hosts.deny          16777484 protocols
34629336 abrt              34517134 pulse
17398342 adjtime            2261925 purple
16777386 aliases            17175091 python
17514465 aliases.db         2928683 qemu-ga
1682796 alsa                51470929 qemu-kvm
33930258 alternatives       17511074 radvd.conf
17456649 anacrontab         51951762 ras
17188431 asound.conf        17551485 rc0.d
17511084 at.deny            17551486 rc1.d
51117654 audisp             16787604 rc2.d
17492085 audit              16787605 rc3.d
35271483 avahi              16777321 issue
74276 bash_completion.d     16777322 issue.net
16777387 bashrc             17334442 java
50945738 binfmt.d           1062076 jvm
51038977 bluetooth          17334445 jvm-common
17569341 brltty             17510263 kdump.conf
17569342 brltty.conf        51951962 kernel
16777385 centos-release     16888233 krb5.conf
16777320 centos-release-upstream 17169707 krb5.conf.d
50372567 chkconfig.d        17453440 ksmtd.conf
17510166 chrony.conf        17551367 ld.so.cache
17510168 chrony.keys        19169332 ld.so.conf
51951965 cifs-utils         50350480 ld.so.conf.d
34579404 cron.d             16888260 libaudit.conf
34484033 cron.daily          51038917 libblockdev
17398315 cron.deny          17453280 libverbs.d
34579402 cron.hourly        33930238 libnl
51066756 cron.monthly       50704433 libpaper.d
16777484 protocols          16777324 redhat-release
34517134 pulse              17026840 request-key.conf
2261925 purple             33978616 request-key.d
17175091 python            17551913 resolv.conf
2928683 qemu-ga            17514463 resolv.conf.save
51470929 qemu-kvm          19169333 rpc
17511074 radvd.conf        33595769 rpm
51951762 ras                17453679 rsyncd.conf
17551485 rc0.d             17551555 rsyslog.conf
17551486 rc1.d             34516806 rsyslog.d
16787604 rc2.d             16888280 rtwab
16787605 rc3.d
```


4. Then use **ls --help** and see other options about **ls** command

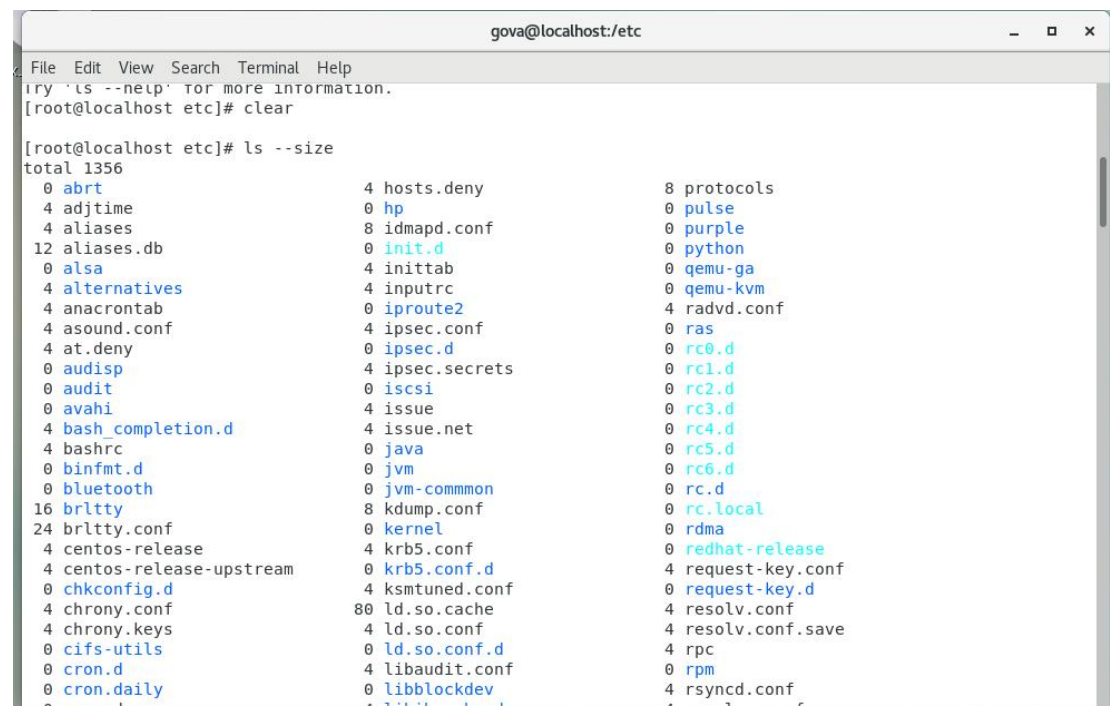
Once I ran **ls --help** it shown me all the **ls** related command we can use



```
gova@localhost:/etc
File Edit View Search Terminal Help
4 hosts.allow 4 profile.d
[root@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
```

and I used one attribute **ls --size** which will show us the size of files in blocks



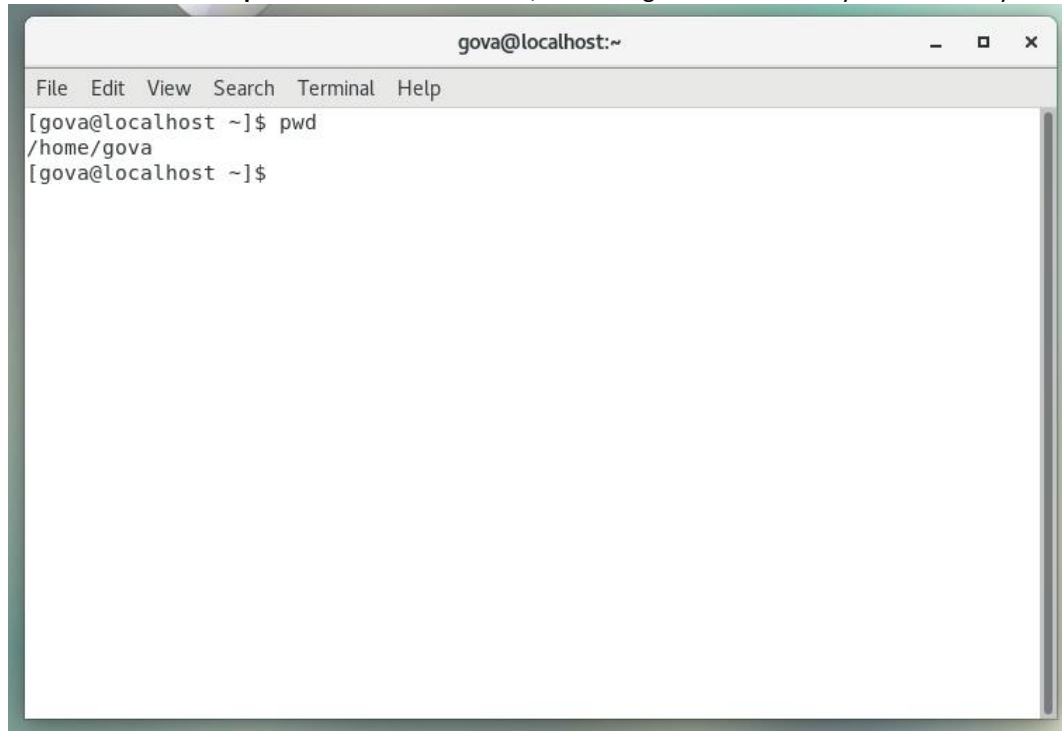
```
gova@localhost:/etc
File Edit View Search Terminal Help
try 'ls --help' for more information.
[root@localhost etc]# clear

[root@localhost etc]# ls --size
total 1356
0 abrt 4 hosts.deny 8 protocols
4 adjtime 0 hp 0 pulse
4 aliases 8 idmapd.conf 0 purple
12 aliases.db 0 init.d 0 python
0 alsa 4 inittab 0 qemu-ga
4 alternatives 4 inputrc 0 qemu-kvm
4 anacrontab 0 iproute2 4 radvd.conf
4 asound.conf 4 ipsec.conf 0 ras
4 at.deny 0 ipsec.d 0 rc0.d
0 audisp 4 ipsec.secrets 0 rc1.d
0 audit 0 iscsi 0 rc2.d
0 avahi 4 issue 0 rc3.d
4 bash_completion.d 4 issue.net 0 rc4.d
4 bashrc 0 java 0 rc5.d
0 binfmt.d 0 jvm 0 rc6.d
0 bluetooth 0 jvm-common 0 rc.d
16 brltty 8 kdump.conf 0 rc.local
24 brltty.conf 0 kernel 0 rdma
4 centos-release 4 krb5.conf 0 redhat-release
4 centos-release-upstream 0 krb5.conf.d 4 request-key.conf
0 chkconfig.d 4 ksmtuned.conf 0 request-key.d
4 chrony.conf 80 ld.so.cache 4 resolv.conf
4 chrony.keys 4 ld.so.conf 4 resolv.conf.save
0 cifs-utils 0 ld.so.conf.d 4 rpc
0 cron.d 4 libaudit.conf 0 rpm
0 cron.daily 0 libblockdev 4 rsyncd.conf
```

Assignment 7: Know where you are and where you working

1. Open terminal after restart the linux and run **pwd** command

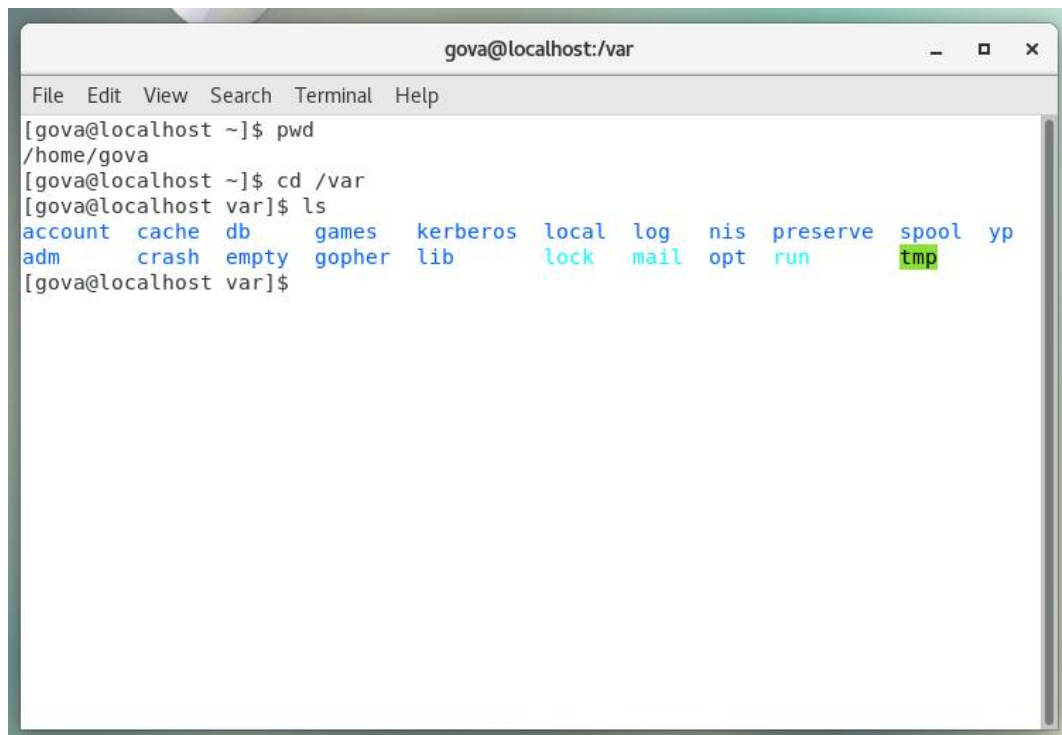
--once restarted I ran **pwd** command in terminal, it showing me that I'm in my user directory

A terminal window titled 'gova@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command 'pwd' being executed, resulting in the output '/home/gova'. The prompt is '[gova@localhost ~]\$'.

2. Now use **cd /var** and hit **Enter** key

-- I ran **cd /var** and **ls** command

-- var directory is sub-directory of root directory

A terminal window titled 'gova@localhost:/var' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the sequence of commands: 'pwd' (output: '/home/gova'), 'cd /var', and 'ls'. The 'ls' command output lists various directories: 'account', 'cache', 'db', 'games', 'kerberos', 'local', 'log', 'nis', 'preserve', 'spool', 'yp', 'adm', 'crash', 'empty', 'gopher', 'lib', 'lock', 'mail', 'opt', 'run', and 'tmp'. The 'tmp' directory is highlighted in green. The prompt is '[gova@localhost var]\$'.