

Devops

Name: Abirami S A

Email: abiramisree1@gmail.com

Topic: Linux Assignment

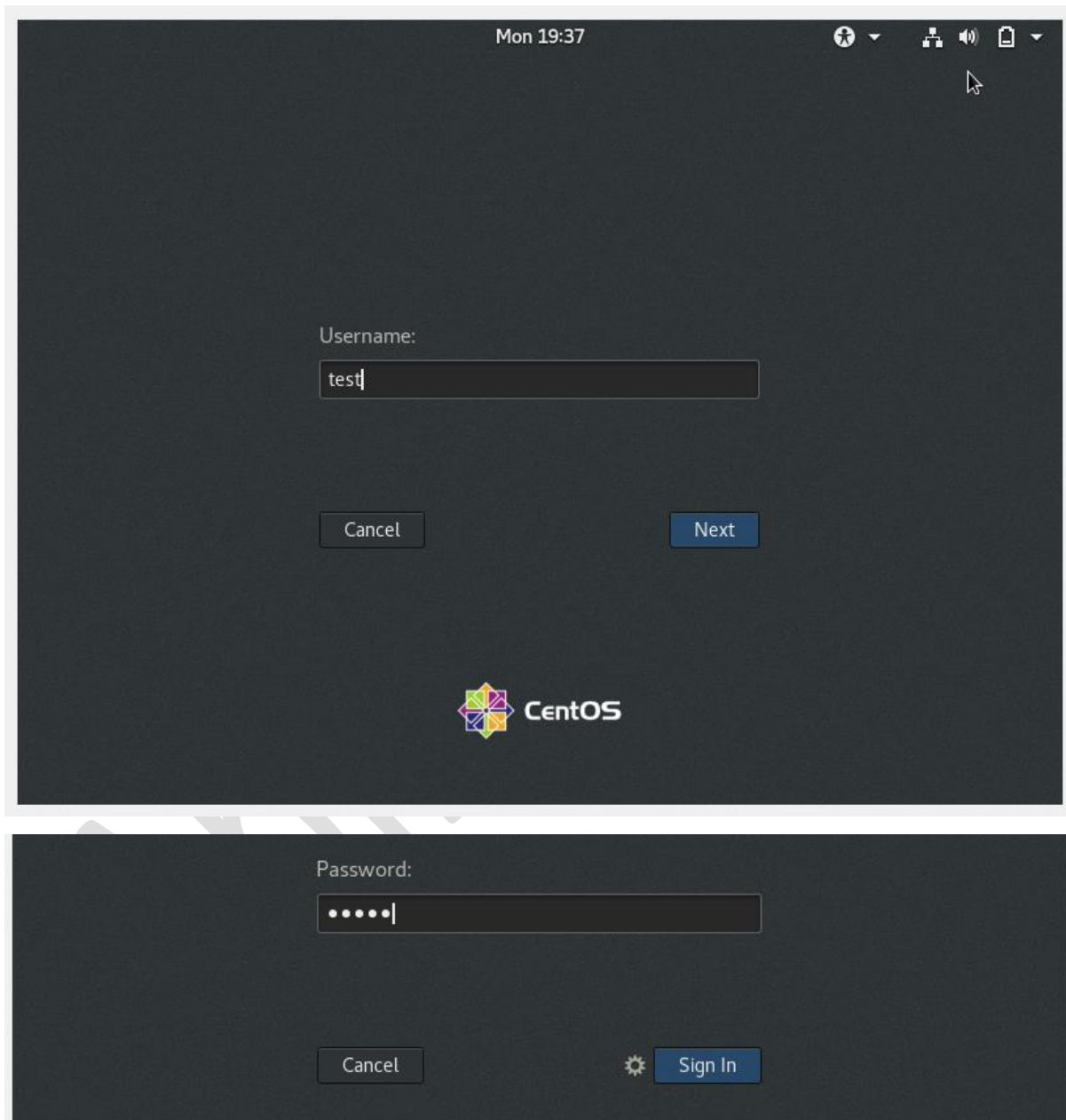
Date: 09 Oct 2022

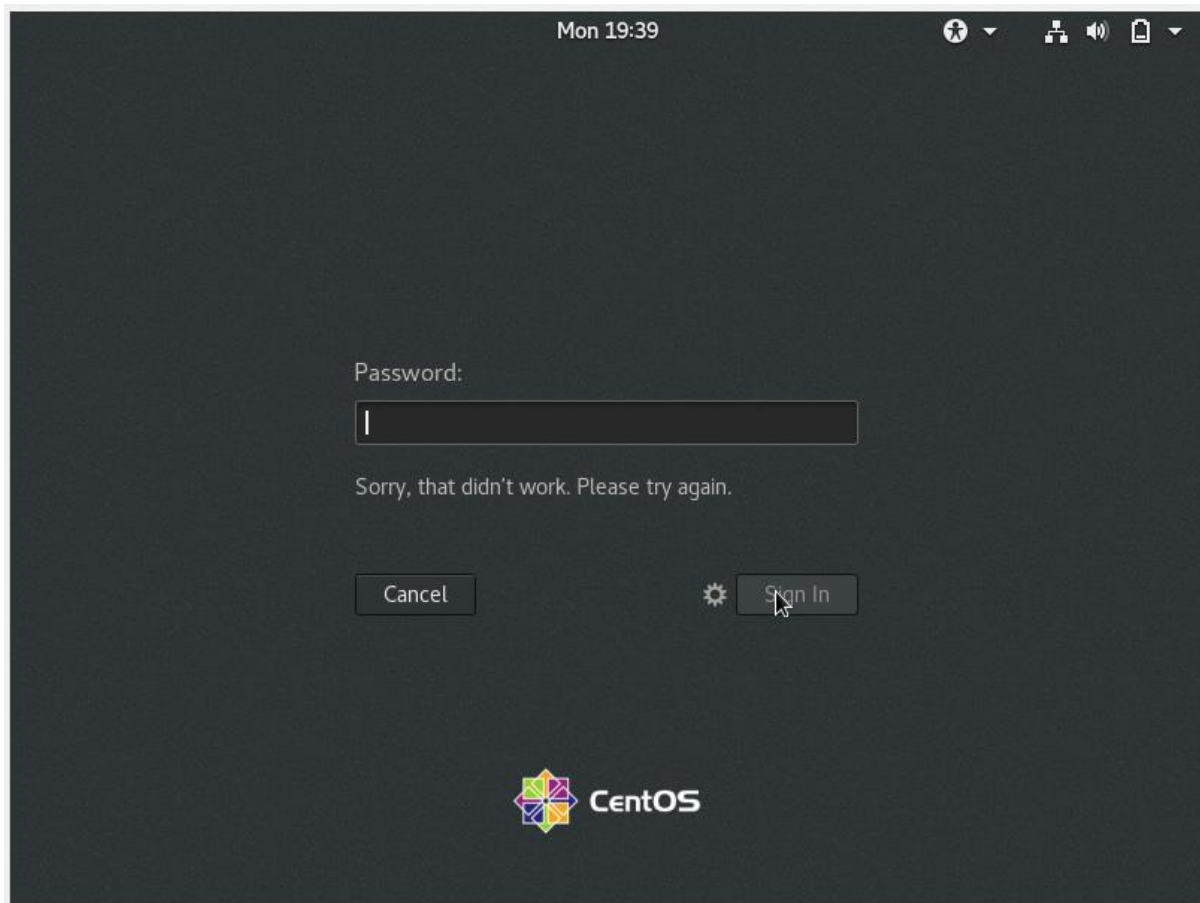
Abirami S A

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?



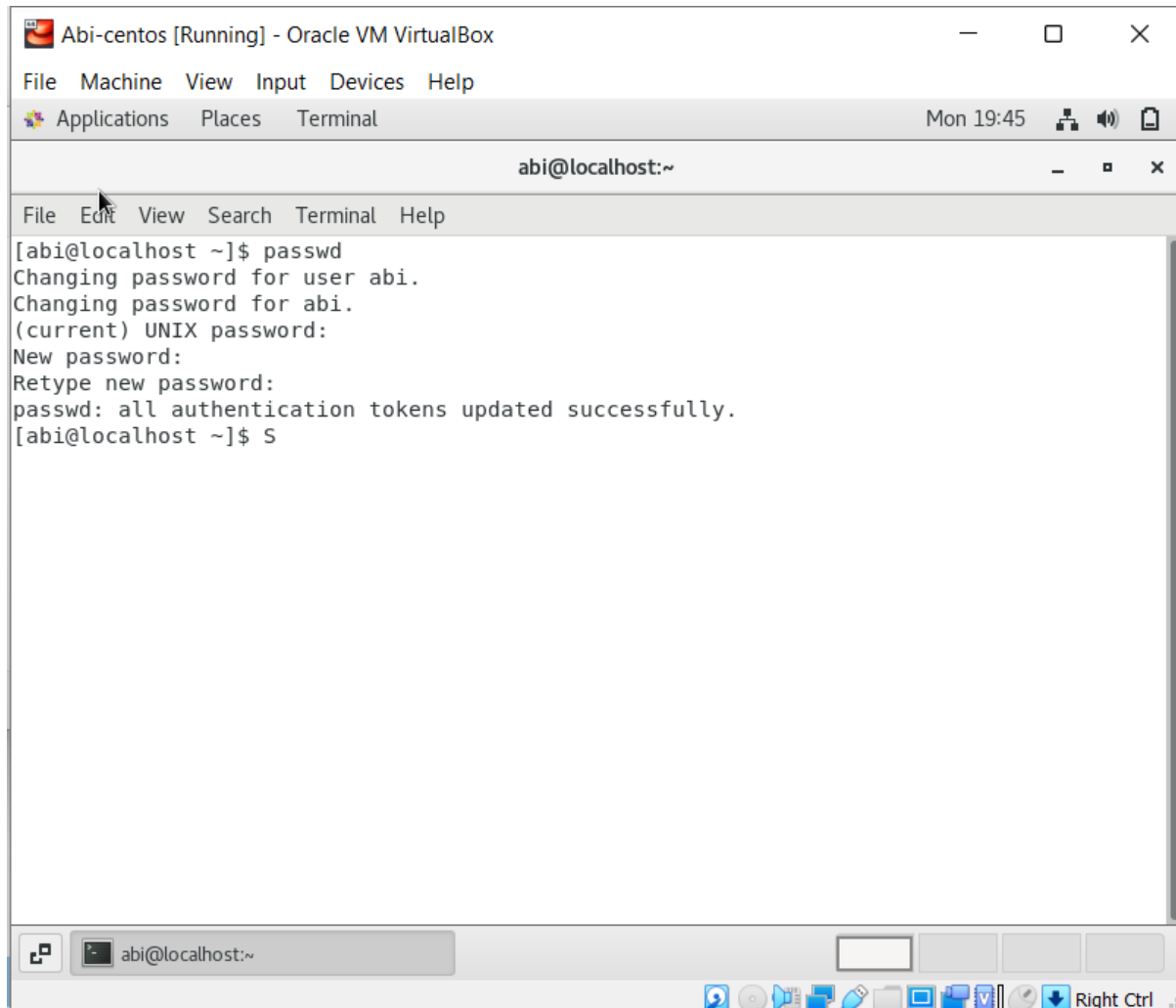


Explanation : Linux doesn't allow users that are not created/authorized to access the system.

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?

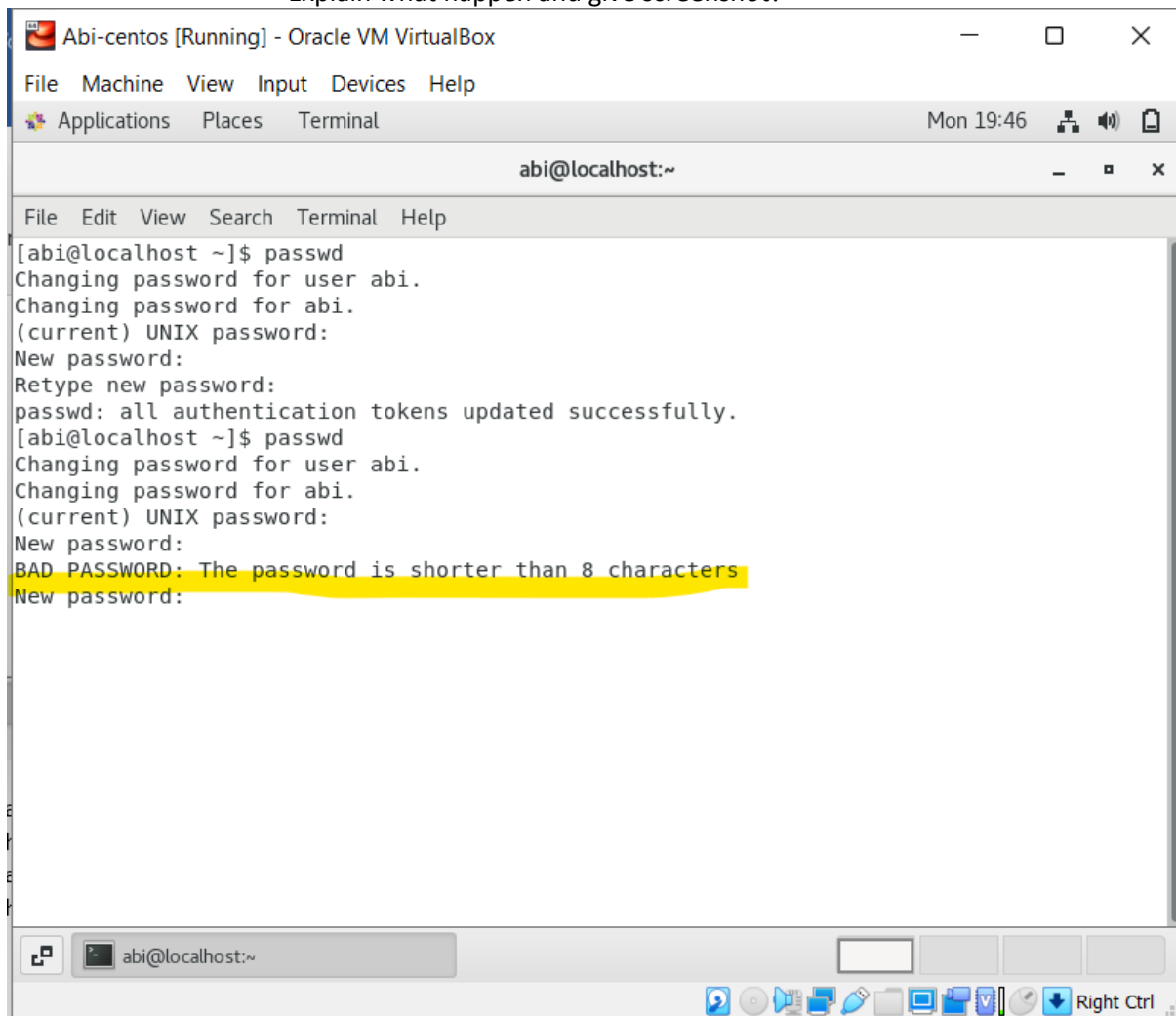


The screenshot shows a terminal window titled 'Abi-centos [Running] - Oracle VM VirtualBox'. The terminal prompt is 'abi@localhost:~'. The user has entered the command 'passwd'. The output shows the password being changed for user 'abi', followed by prompts for the current and new passwords. The new password is 'IneuR0n#42', and the system confirms that all authentication tokens have been updated successfully. The terminal prompt returns to 'abi@localhost ~]\$'.

```
[abi@localhost ~]$ passwd
Changing password for user abi.
Changing password for abi.
(current) UNIX password:
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[abi@localhost ~]$ S
```

Explanation : Password gets changed successfully if a secure password with numbers, alphabets and special characters are provided.

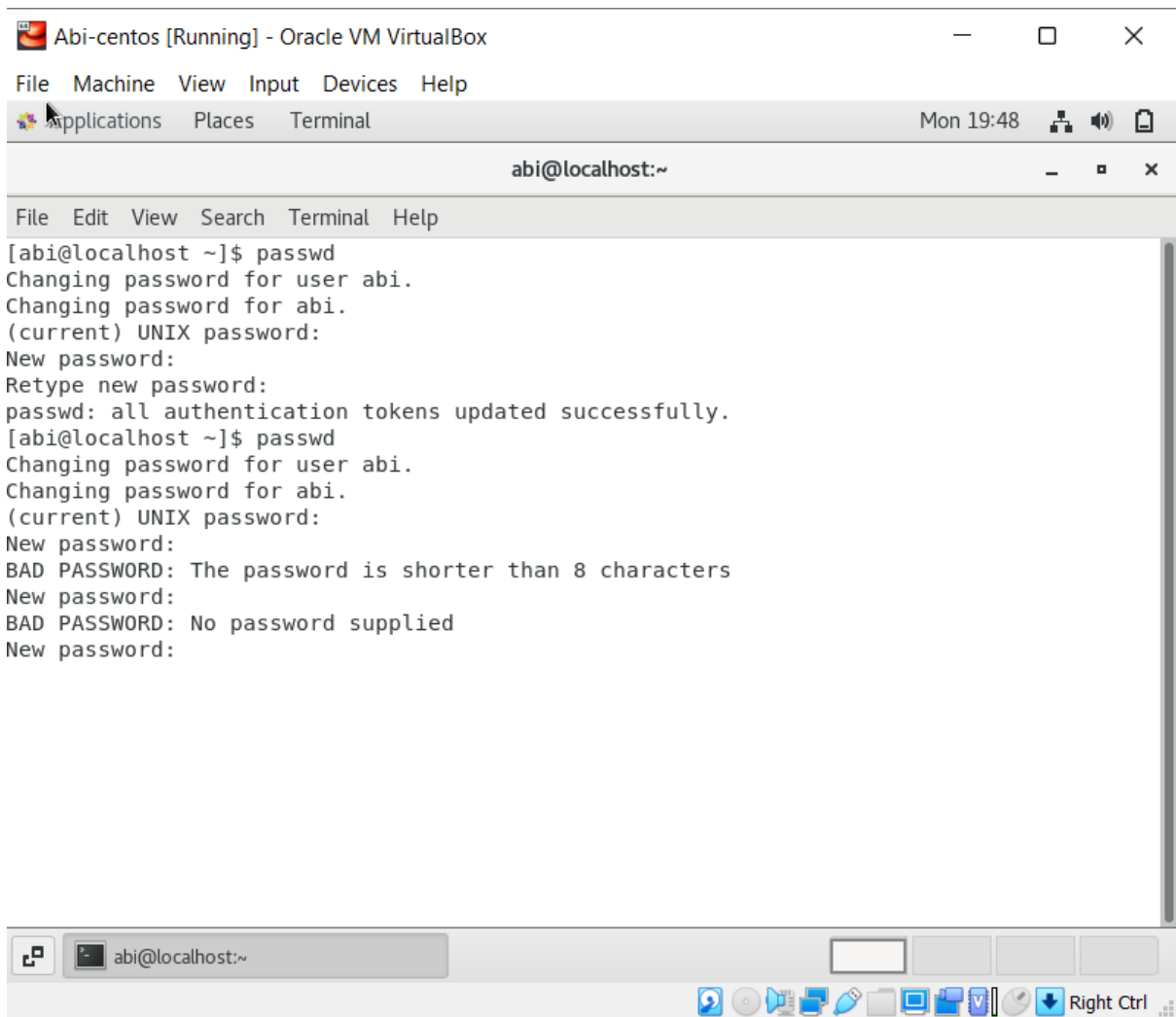
- Try again to change password but use like password **1234** or **abcd**
 - Explain what happen and give screenshot?



```
Abi-centos [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal Mon 19:46
abi@localhost:~
File Edit View Search Terminal Help
[abi@localhost ~]$ passwd
Changing password for user abi.
Changing password for abi.
(current) UNIX password:
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[abi@localhost ~]$ passwd
Changing password for user abi.
Changing password for abi.
(current) UNIX password:
New password:
BAD PASSWORD: The password is shorter than 8 characters
New password:
```

Explanation: If the password is shorter than 8 characters, then linux will reject the same.

- Try again to change password but now don't use any password just hit **Enter** key
 - Explain what happen and give screenshot?



The screenshot shows a terminal window titled 'Abi-centos [Running] - Oracle VM VirtualBox'. The terminal prompt is 'abi@localhost:~'. The user enters 'passwd' and the system prompts for the current password, then the new password, and finally the new password again. The system then displays 'passwd: all authentication tokens updated successfully.' The user enters 'passwd' again, and the system prompts for the current password, then the new password, and finally the new password again. The system then displays 'BAD PASSWORD: The password is shorter than 8 characters', 'BAD PASSWORD: No password supplied', and 'BAD PASSWORD: No password supplied'.

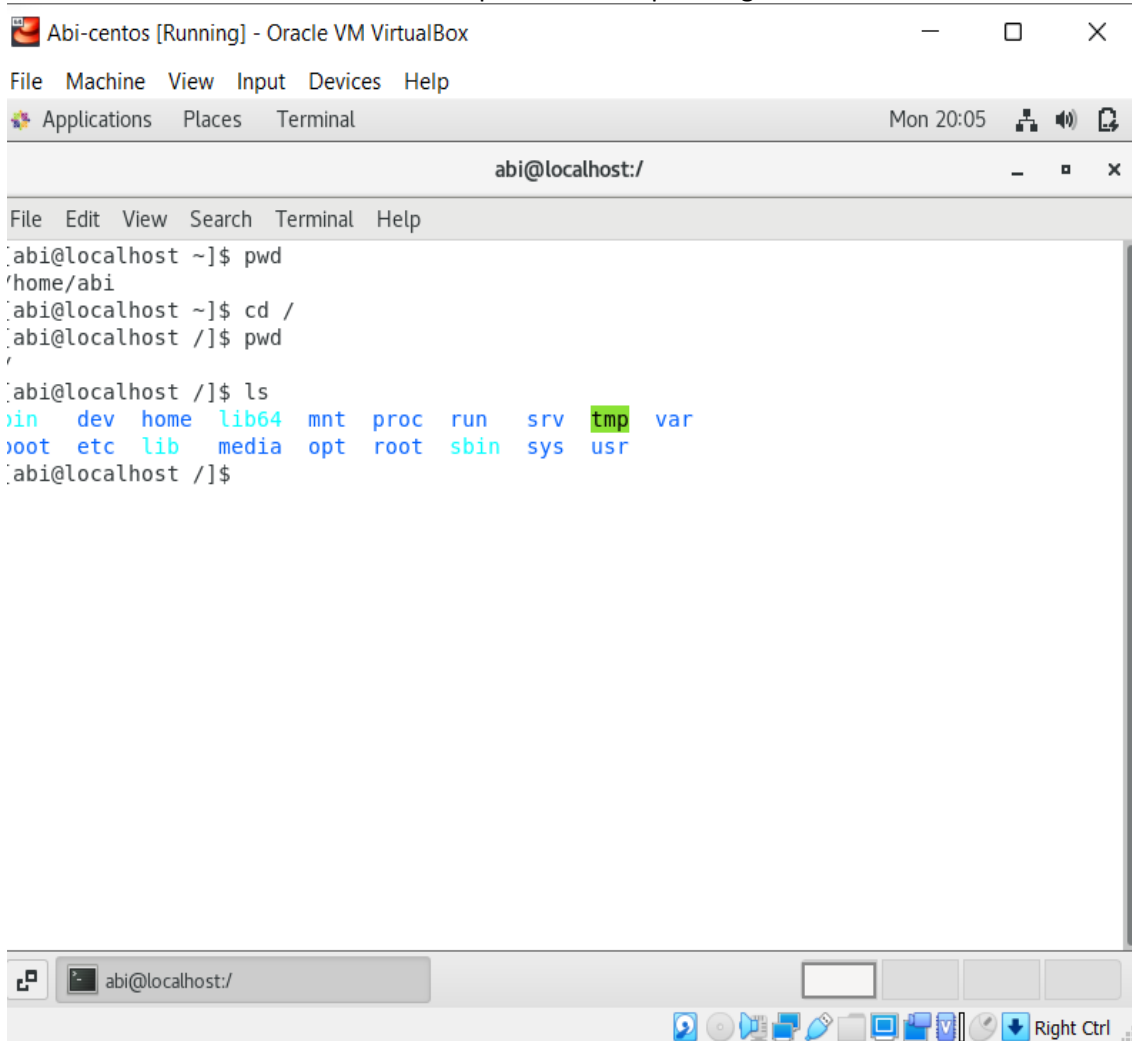
```
[abi@localhost ~]$ passwd
Changing password for user abi.
Changing password for abi.
(current) UNIX password:
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[abi@localhost ~]$ passwd
Changing password for user abi.
Changing password for abi.
(current) UNIX password:
New password:
BAD PASSWORD: The password is shorter than 8 characters
New password:
BAD PASSWORD: No password supplied
New password:
```

Explanation: If the password is empty then Linux will prompt “no password is supplied” and it will be rejected.

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?



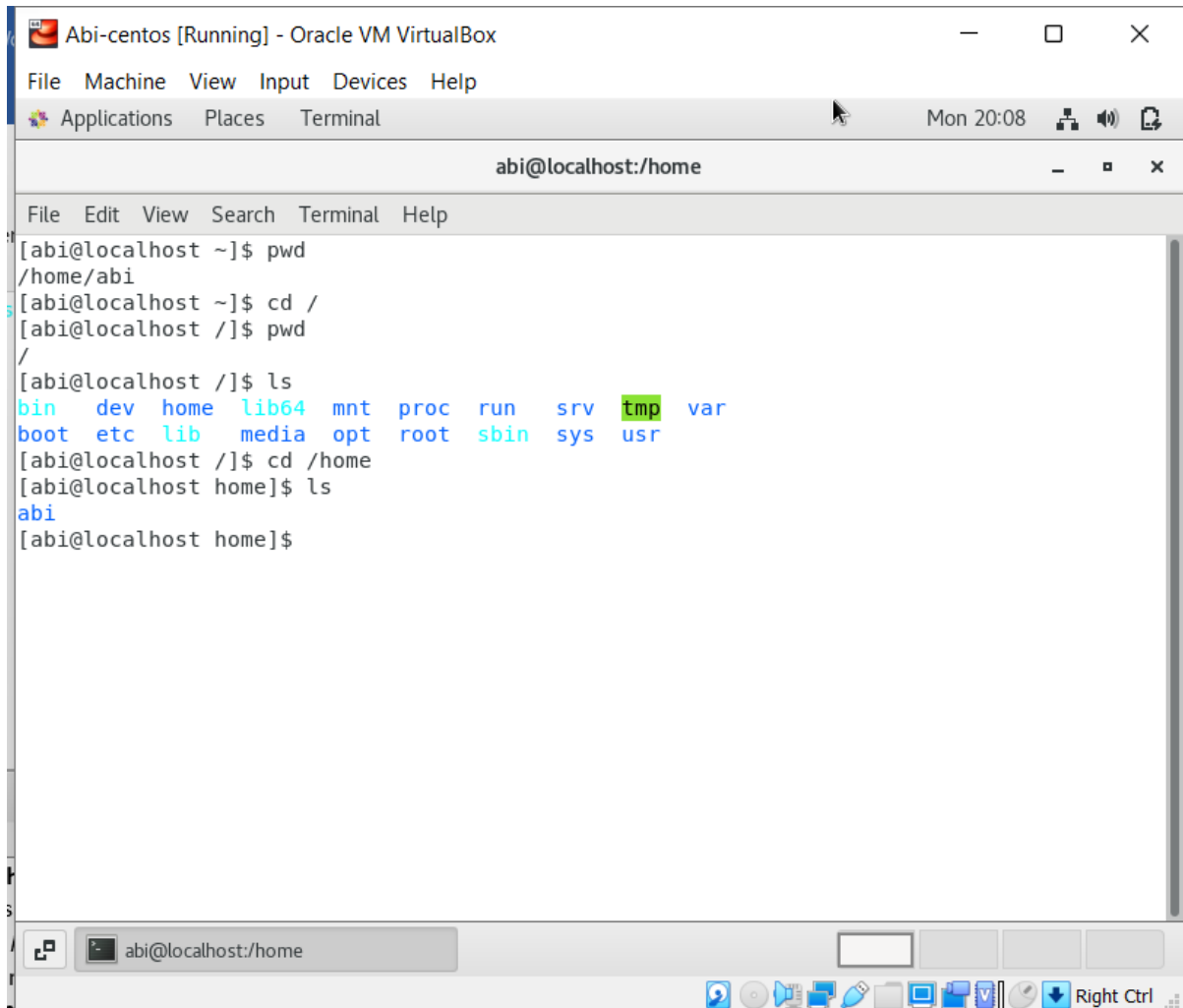
The screenshot shows a terminal window titled "Abi-centos [Running] - Oracle VM VirtualBox". The terminal has a menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". Below the menu bar is a toolbar with "Applications", "Places", and "Terminal". The terminal's title bar shows "abi@localhost:/" and standard window controls. The terminal's menu bar includes "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal output shows the following commands and results:

```
abi@localhost ~]$ pwd
/home/abi
abi@localhost ~]$ cd /
abi@localhost /]$ pwd
/
abi@localhost /]$ ls
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var
root  etc  lib   media  opt  root  sbin  sys  usr
```

The terminal window also features a taskbar at the bottom with various system icons and a "Right Ctrl" button.

Explanation : `cd /` will take to the root directory. `ls` will display the files and folders within the current directory which is root in this case.

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

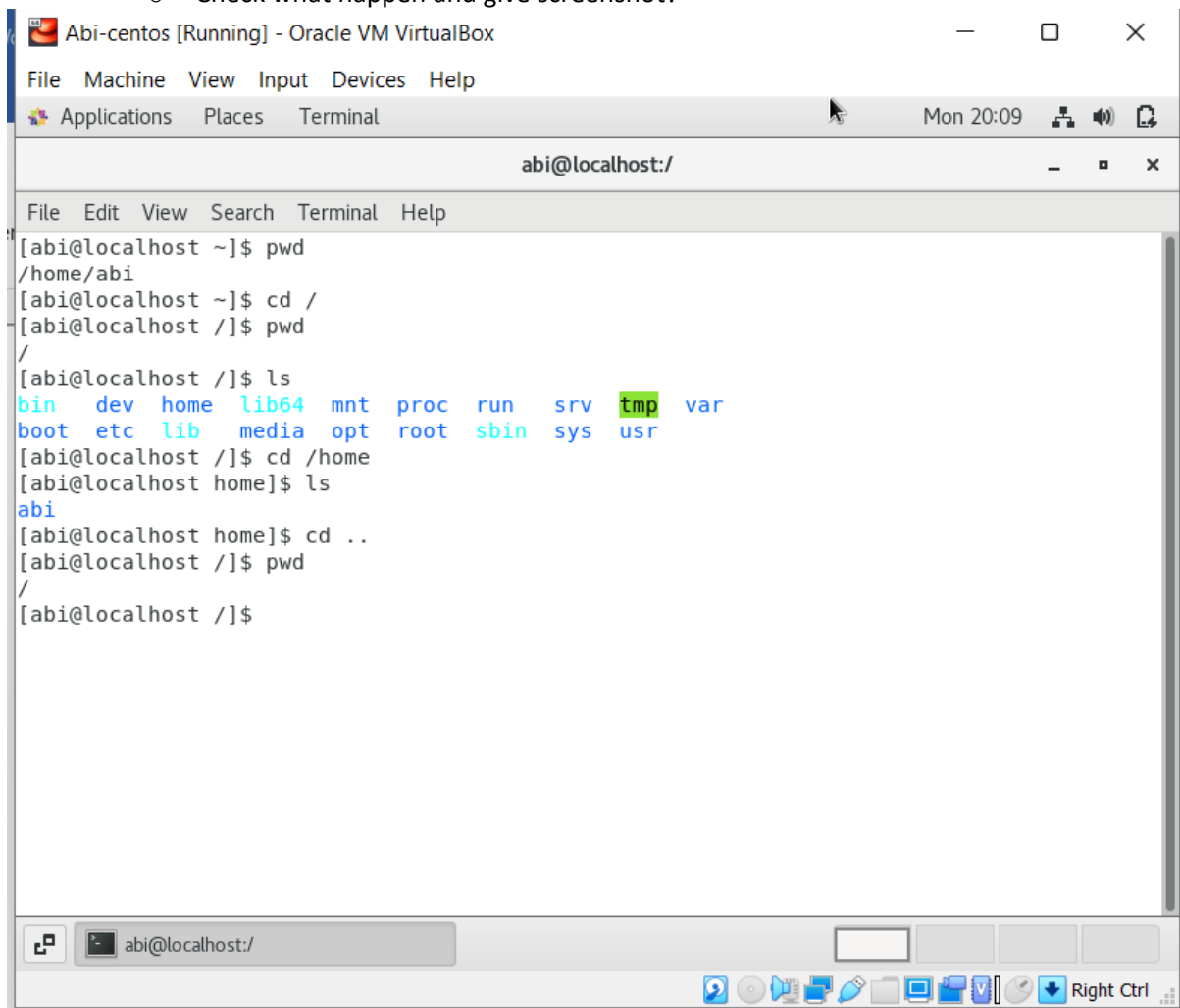


```
Abi-centos [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal Mon 20:08
abi@localhost:/home

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

Explanation: `cd /home` will take to the `/home` directory. `/home` contain all the users home directory.

- Enter **cd ..** and hit **Enter** key [*Note: here we have space after cd then use double dot*]
 - Check what happen and give screenshot?

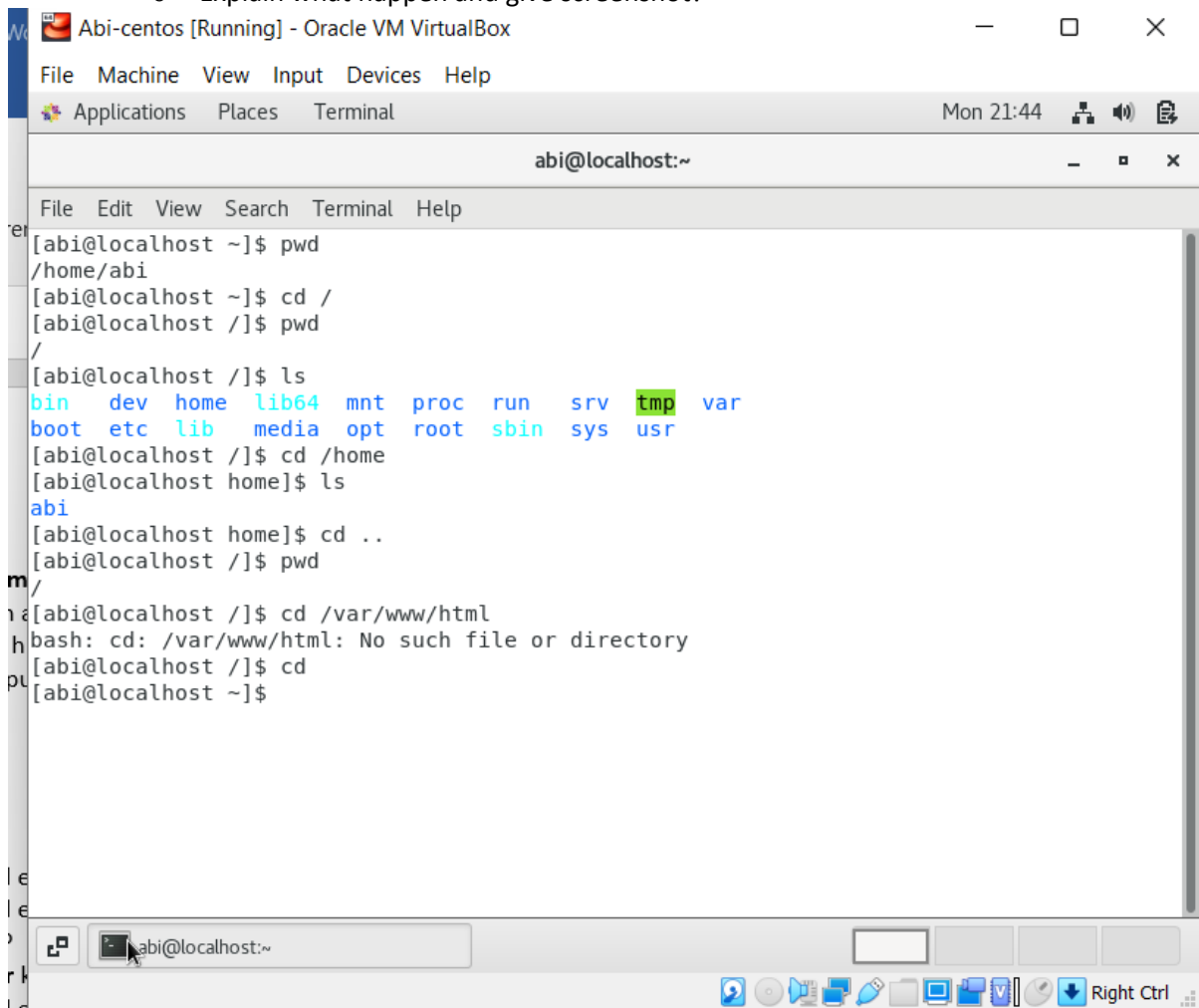


The screenshot shows a terminal window titled "Abi-centos [Running] - Oracle VM VirtualBox". The window has a menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". Below the menu bar is a toolbar with "Applications", "Places", and "Terminal". The terminal itself has a title bar "abi@localhost:/" and a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows the following commands and output:

```
[abi@localhost ~]$ pwd
/home/abi
[abi@localhost ~]$ cd /
[abi@localhost /]$ pwd
/
[abi@localhost /]$ ls
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var
boot  etc  lib  media  opt  root  sbin  sys  usr
[abi@localhost /]$ cd /home
[abi@localhost home]$ ls
abi
[abi@localhost home]$ cd ..
[abi@localhost /]$ pwd
/
[abi@localhost /]$
```

The terminal window also features a taskbar at the bottom with various system icons and a "Right Ctrl" button.

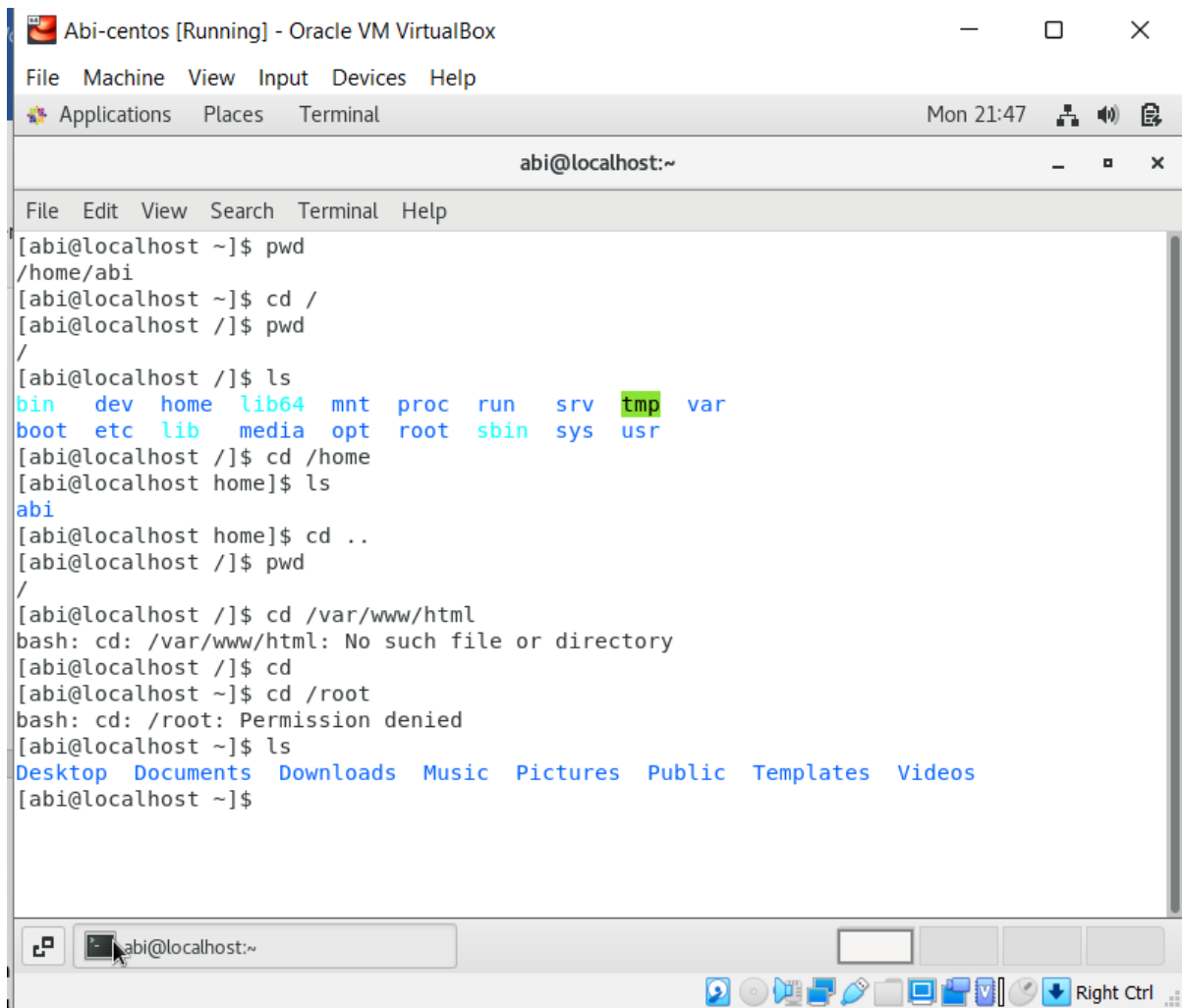
- Now enter **cd /var/www/html** and then type **cd** and hit **Enter** key
 - Explain what happen and give screenshot?



```
Abi-centos [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal Mon 21:44
abi@localhost:~
File Edit View Search Terminal Help
[abi@localhost ~]$ pwd
/home/abi
[abi@localhost ~]$ cd /
[abi@localhost /]$ pwd
/
[abi@localhost /]$ ls
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var
boot  etc  lib  media  opt  root  sbin  sys  usr
[abi@localhost /]$ cd /home
[abi@localhost home]$ ls
abi
[abi@localhost home]$ cd ..
[abi@localhost /]$ pwd
/
[abi@localhost /]$ cd /var/www/html
bash: cd: /var/www/html: No such file or directory
[abi@localhost /]$ cd
[abi@localhost ~]$
```

Explanation: Gave an error because the folders mentioned was not available.

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



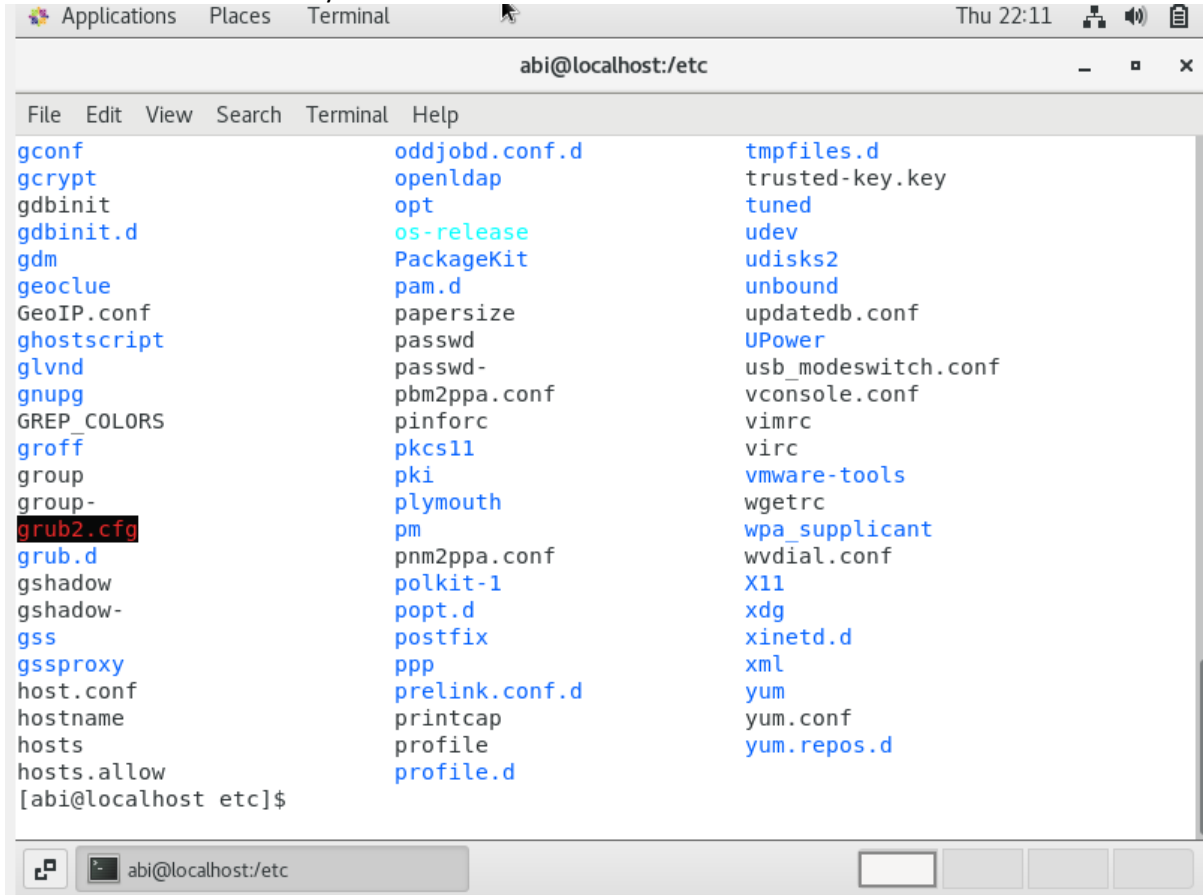
```
Abi-centos [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal Mon 21:47
abi@localhost:~

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

Assignment-4

Working with File Listing

- Go to **cd /etc** and type **ls**
 - Take screenshot and explain what files you have seeing?
 - Take screenshot and explain what different output you found compare to previous command you used?



```
Applications  Places  Terminal  Thu 22:11
abi@localhost:/etc

File Edit View Search Terminal Help

gconf          oddjobd.conf.d  tmpfiles.d
gcrypt         openldap        trusted-key.key
gdbinit        opt             tuned
gdbinit.d      os-release      udev
gdm            PackageKit      udisks2
geoclue        pam.d           unbound
GeoIP.conf     papersize       updatedb.conf
ghostscript    passwd          UPower
glvnd          passwd-         usb_modeswitch.conf
gnupg          pbm2ppa.conf   vconsole.conf
GREP_COLORS    pinforc        vimrc
groff          pkcs11         virg
group          pki            vmware-tools
group-         plymouth       wgetrc
grub2.cfg      pm             wpa_supplicant
grub.d         pnm2ppa.conf   wvdial.conf
gshadow        polkit-1       X11
gshadow-       popt.d         xdg
gss            postfix        xinetd.d
gssproxy       ppp            xml
host.conf      prelink.conf.d yum
hostname       printcap       yum.conf
hosts          profile        yum.repos.d
hosts.allow    profile.d

[abi@localhost etc]$
```

Explanation: most of the files are configuration files. Root directory had folders

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

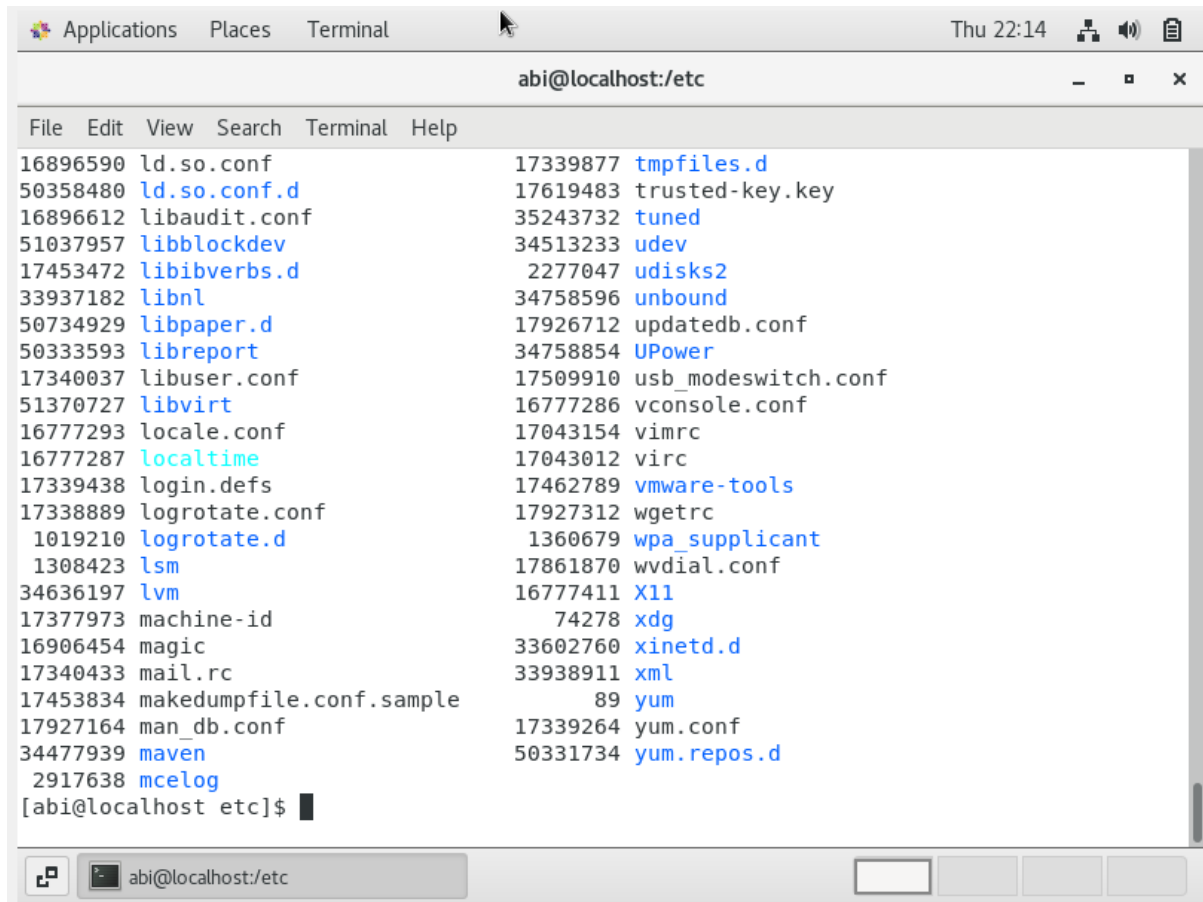
```

abi@localhost:/etc
File Edit View Search Terminal Help
drwxr-xr-x. 2 root root 6 Oct 1 2020 tmpfiles.d
-rw-r--r--. 1 root root 750 Oct 13 2020 trusted-key.key
drwxr-xr-x. 3 root root 109 Oct 10 19:15 tuned
drwxr-xr-x. 3 root root 54 Oct 10 19:29 udev
drwxr-xr-x. 2 root root 26 Oct 10 19:13 udisks2
drwxr-xr-x. 2 root root 68 Oct 10 19:12 unbound
-rw-r--r--. 1 root root 163 Oct 10 19:08 .updated
-rw-r--r--. 1 root root 557 Apr 11 2018 updatedb.conf
drwxr-xr-x. 2 root root 25 Oct 10 19:12 UPower
-rw-r--r--. 1 root root 1523 Apr 11 2018 usb_modeswitch.conf
-rw-r--r--. 1 root root 37 Oct 10 19:21 vconsole.conf
-rw-r--r--. 1 root root 1982 Oct 13 2020 vimrc
-rw-r--r--. 1 root root 1982 Oct 13 2020 virrc
drwxr-xr-x. 4 root root 208 Oct 10 19:12 vmware-tools
-rw-r--r--. 1 root root 4479 May 16 2019 wgetrc
drwxr-xr-x. 2 root root 33 Oct 10 19:11 wpa_supplicant
-rw-r--r--. 1 root root 0 Jun 10 2014 wvdial.conf
drwxr-xr-x. 6 root root 103 Oct 10 19:11 X11
drwxr-xr-x. 6 root root 116 Oct 10 19:12 xdg
drwxr-xr-x. 2 root root 6 Apr 11 2018 xinetd.d
drwxr-xr-x. 2 root root 21 Oct 10 19:09 xml
drwxr-xr-x. 6 root root 100 Oct 10 19:11 yum
-rw-r--r--. 1 root root 970 Oct 1 2020 yum.conf
drwxr-xr-x. 2 root root 220 Oct 1 2020 yum.repos.d
[abi@localhost etc]$

```

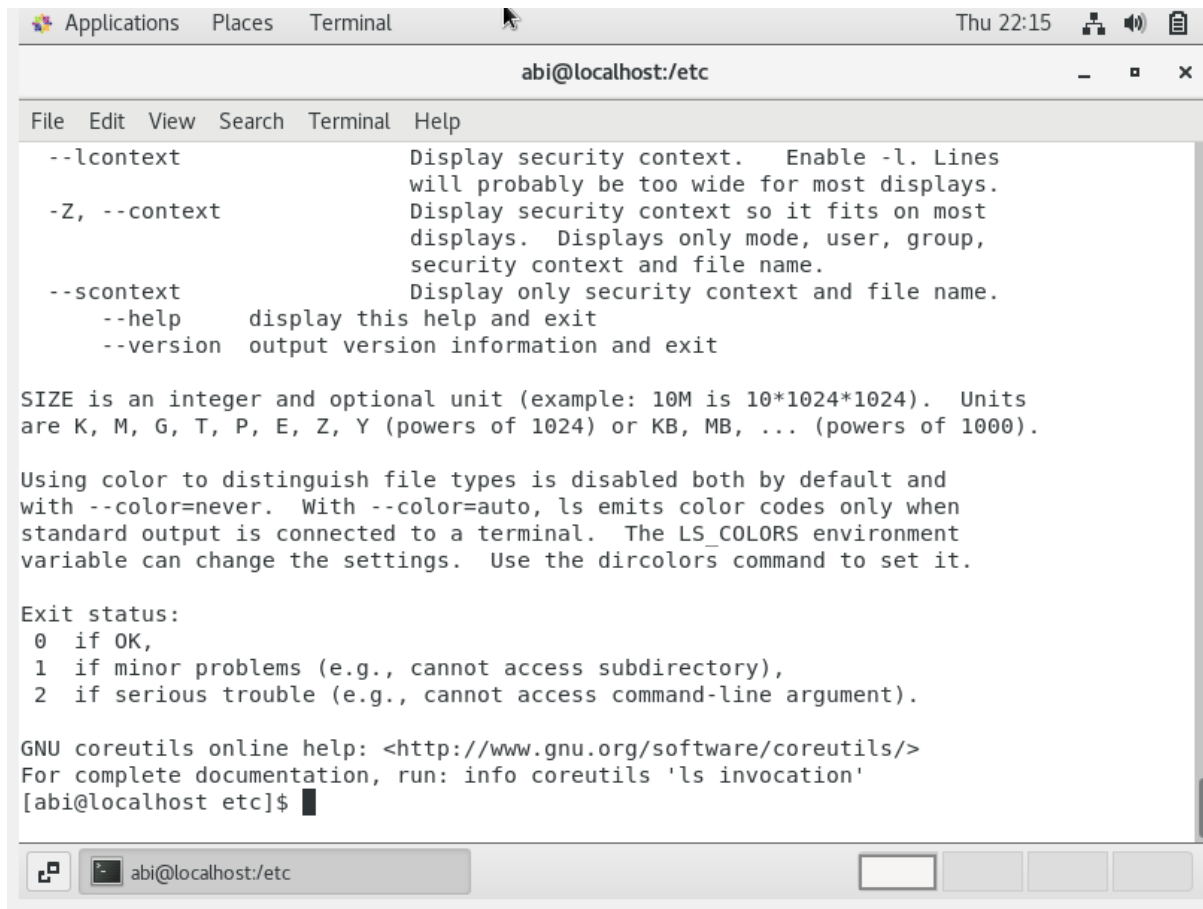
Explanation: We can see hidden files as well example “.updated”.

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



```
abi@localhost:/etc
File Edit View Search Terminal Help
16896590 ld.so.conf
50358480 ld.so.conf.d
16896612 libaudit.conf
51037957 libblockdev
17453472 libibverbs.d
33937182 libnl
50734929 libpaper.d
50333593 libreport
17340037 libuser.conf
51370727 libvirt
16777293 locale.conf
16777287 localtime
17339438 login.defs
17338889 logrotate.conf
1019210 logrotate.d
1308423 lsm
34636197 lvm
17377973 machine-id
16906454 magic
17340433 mail.rc
17453834 makedumpfile.conf.sample
17927164 man_db.conf
34477939 maven
2917638 mcelog
17339877 tmpfiles.d
17619483 trusted-key.key
35243732 tuned
34513233 udev
2277047 udisks2
34758596 unbound
17926712 updatedb.conf
34758854 UPower
17509910 usb_modeswitch.conf
16777286 vconsole.conf
17043154 vimrc
17043012 virch
17462789 vmware-tools
17927312 wgetrc
1360679 wpa_supplicant
17861870 wvdial.conf
16777411 X11
74278 xdg
33602760 xinetd.d
33938911 xml
89 yum
17339264 yum.conf
50331734 yum.repos.d
[abi@localhost etc]$
```

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



```
Applications  Places  Terminal  Thu 22:15
abi@localhost:/etc

File Edit View Search Terminal Help

--lcontext      Display security context.  Enable -l. Lines
                  will probably be too wide for most displays.
-Z, --context   Display security context so it fits on most
                  displays.  Displays only mode, user, group,
                  security context and file name.
--scontext      Display only security context and file name.
--help          display this help and exit
--version       output version information and exit

SIZE is an integer and optional unit (example: 10M is 10*1024*1024).  Units
are K, M, G, T, P, E, Z, Y (powers of 1024) or KB, MB, ... (powers of 1000).

Using color to distinguish file types is disabled both by default and
with --color=never.  With --color=auto, ls emits color codes only when
standard output is connected to a terminal.  The LS_COLORS environment
variable can change the settings.  Use the dircolors command to set it.

Exit status:
0  if OK,
1  if minor problems (e.g., cannot access subdirectory),
2  if serious trouble (e.g., cannot access command-line argument).

GNU coreutils online help: <http://www.gnu.org/software/coreutils/>
For complete documentation, run: info coreutils 'ls invocation'
[abi@localhost etc]$
```

ApplicationsPlacesTerminal

Thu 22:17

abi@localhost:/etc

FileEditViewSearchTerminalHelp

-rw-r--r--.	1	root	root	37	Oct	10	19:21	vconsole.conf
lrwxrwxrwx.	1	root	root	34	Oct	10	19:21	localtime -> ../usr/share/zoneinfo/Asia/Kolkata
-rw-r--r--.	1	root	root	16	Oct	10	19:21	adjtime
-rw-r--r--.	1	root	root	19	Oct	10	19:21	locale.conf
-rw-r--r--.	1	root	root	22	Oct	10	19:21	hostname
-rw-r--r--.	1	root	root	2260	Oct	10	19:21	passwd-
drwxr-xr-x.	6	root	root	4096	Oct	10	19:22	sysconfig
drwxr-xr-x.	3	root	root	54	Oct	10	19:29	udev
drwxr-xr-x.	3	root	root	83	Oct	10	19:29	audit
drwxr-xr-x.	2	root	root	225	Oct	10	19:29	ssh
-rw-r--r--.	1	root	root	12288	Oct	10	19:29	aliases.db
drwx-----.	5	root	root	199	Oct	10	19:29	libvirt
-----.	1	root	root	1239	Oct	10	19:53	shadow-
-----.	1	root	root	801	Oct	10	22:21	gshadow-
-rw-r--r--.	1	root	root	997	Oct	10	22:21	group-
-rw-r--r--.	1	root	root	2303	Oct	10	22:21	passwd
-----.	1	root	root	1268	Oct	10	22:21	shadow
-rw-r--r--.	1	root	root	20	Oct	10	22:21	subuid
-rw-r--r--.	1	root	root	20	Oct	10	22:21	subgid
-rw-r--r--.	1	root	root	1004	Oct	10	22:22	group
-----.	1	root	root	808	Oct	10	22:22	gshadow
-rw-r--r--.	1	root	root	53	Oct	13	22:04	resolv.conf
drwxr-xr-x.	5	root	lp	4096	Oct	13	22:06	cups

[abi@localhost etc]\$

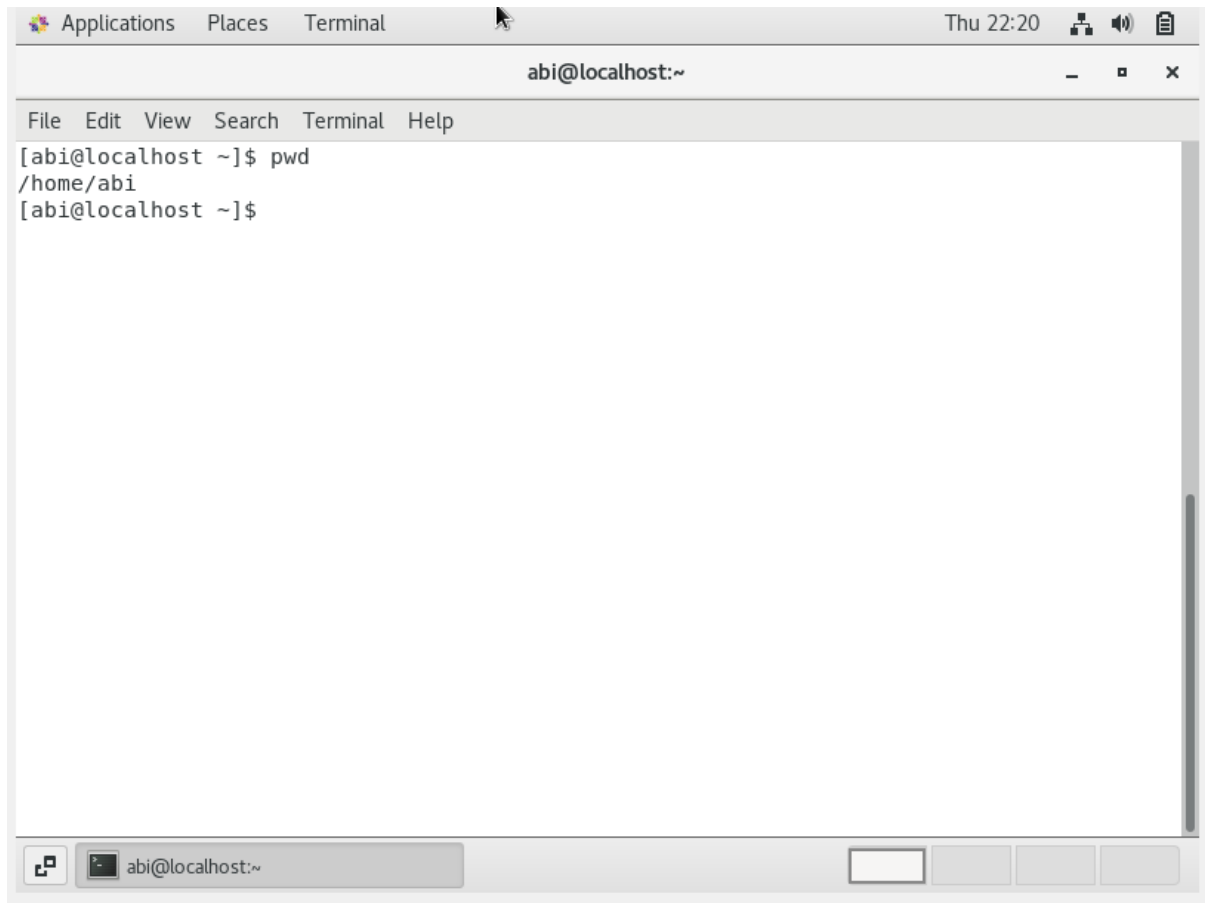
abi@localhost:/etc

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.

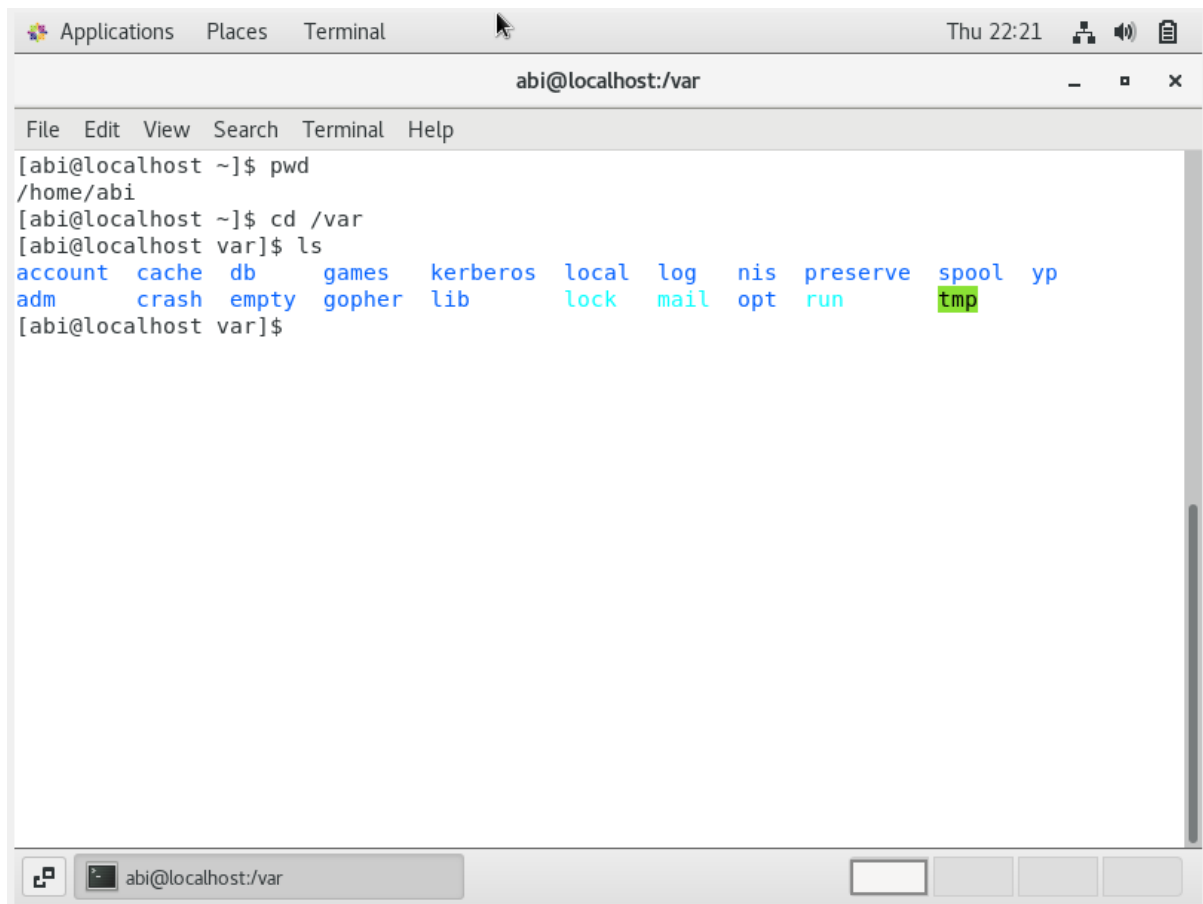
- Open terminal after restart the linux
 - Check which location you working, type **pwd** and take screenshot



The screenshot shows a Linux terminal window titled "abi@localhost:~". The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows the user typing the command `pwd` and receiving the output `/home/abi`. The prompt `[abi@localhost ~]$` is visible at the end of the line. The window's title bar includes "Applications", "Places", "Terminal", and a clock showing "Thu 22:20". The bottom status bar shows the terminal icon, the text "abi@localhost:~", and several empty buttons.

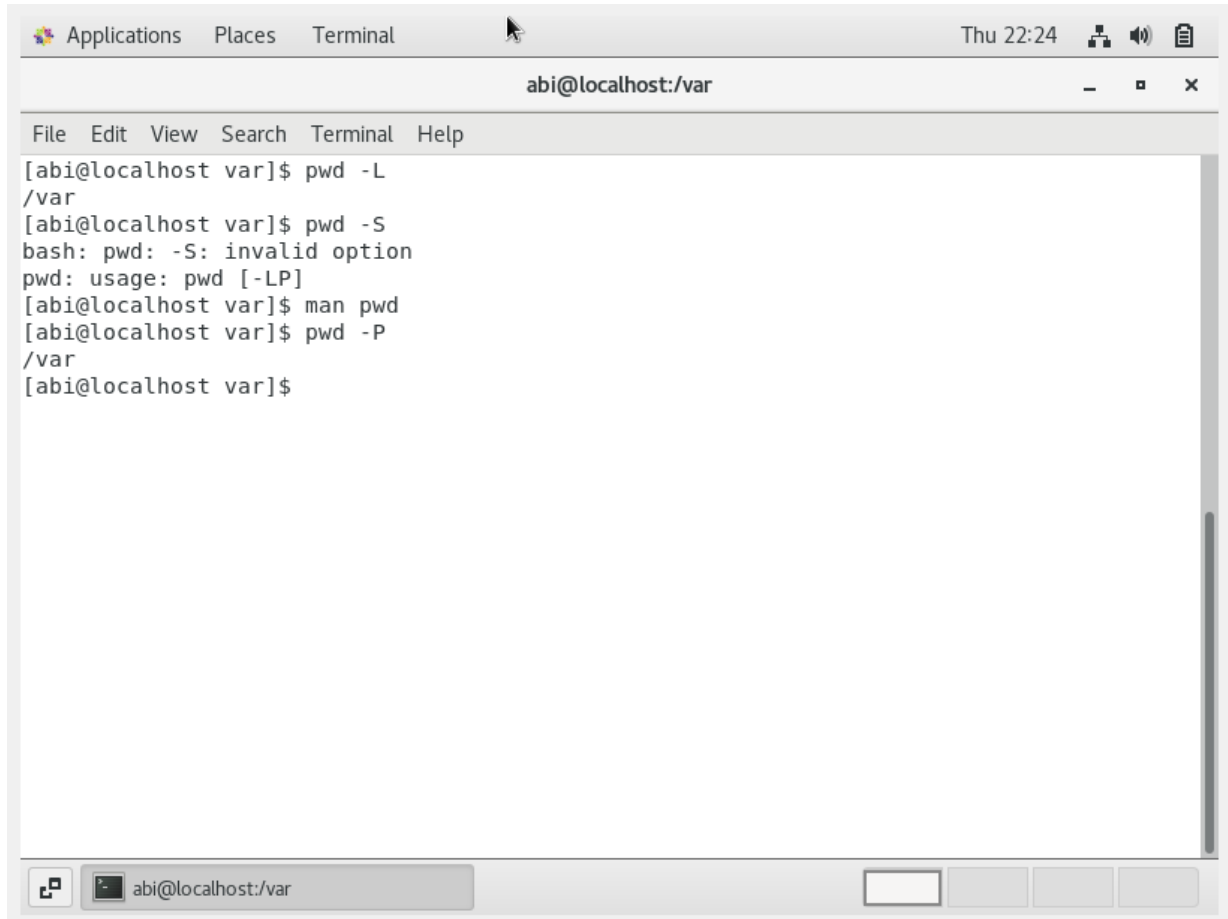
```
abi@localhost:~  
File Edit View Search Terminal Help  
[abi@localhost ~]$ pwd  
/home/abi  
[abi@localhost ~]$
```

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



```
[abi@localhost ~]$ pwd
/home/abi
[abi@localhost ~]$ cd /var
[abi@localhost var]$ ls
account  cache  db      games  kerberos  local  log  nis  preserve  spool  yp
adm      crash  empty  gopher  lib       lock   mail  opt  run       tmp
```

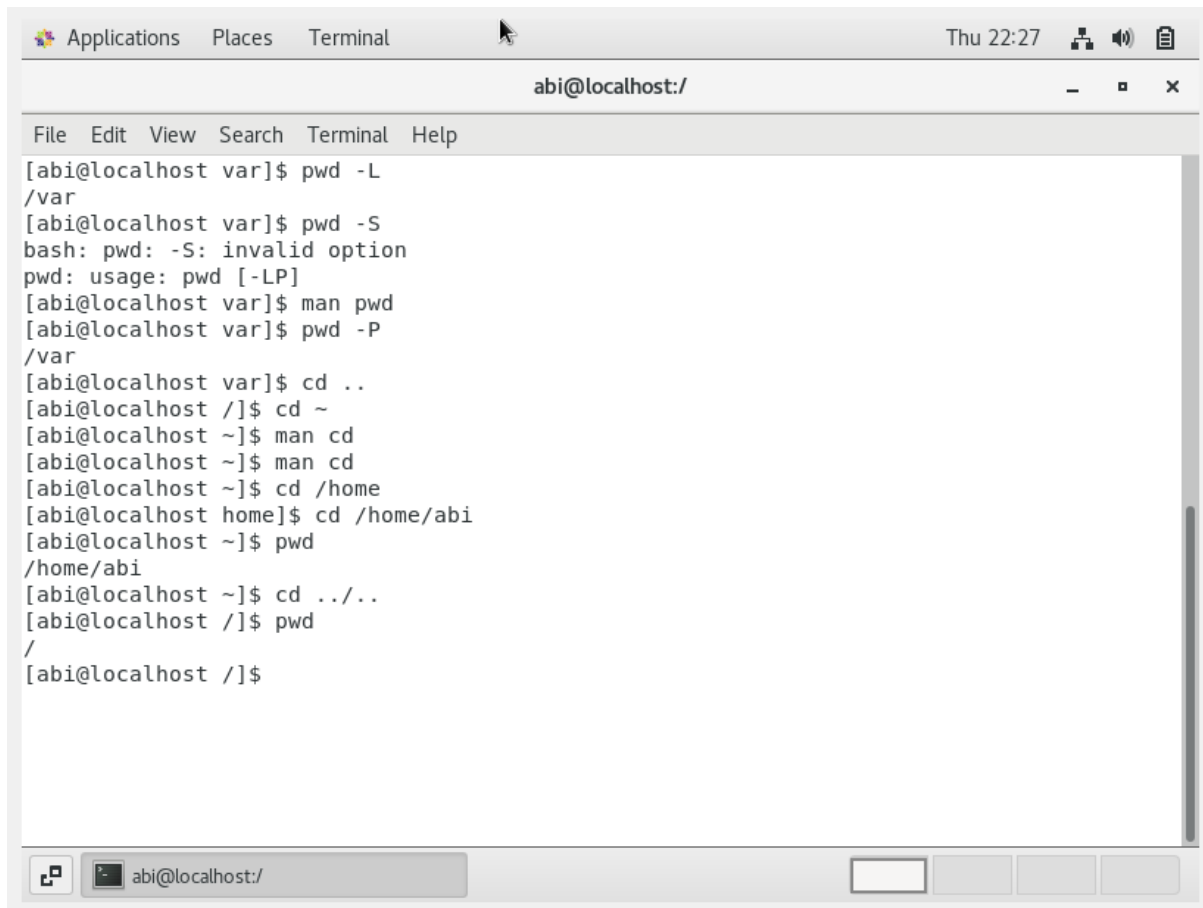
- Do explore other help options of each command to learn more other things we can do with these commands



The screenshot shows a terminal window titled 'abi@localhost:/var'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal output shows the following commands and their results:

```
[abi@localhost var]$ pwd -L
/var
[abi@localhost var]$ pwd -S
bash: pwd: -S: invalid option
pwd: usage: pwd [-LP]
[abi@localhost var]$ man pwd
[abi@localhost var]$ pwd -P
/var
[abi@localhost var]$
```

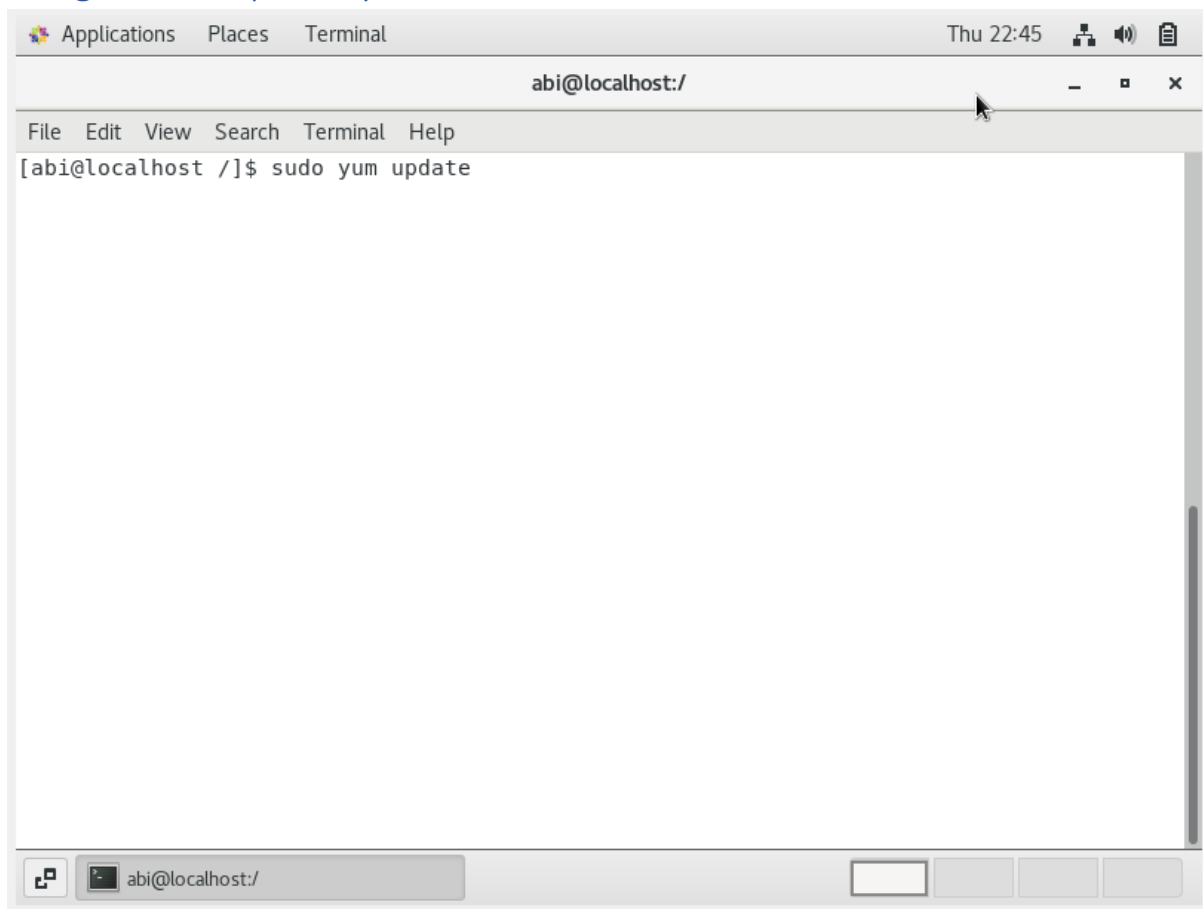
The terminal window also shows a taskbar at the bottom with a single active window titled 'abi@localhost:/var'.



The image shows a terminal window titled 'abi@localhost:/' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar at the bottom. The terminal displays a series of commands and their outputs, including directory changes and pwd usage. A large, light gray watermark 'Abirah' is visible diagonally across the lower half of the image.

```
[abi@localhost var]$ pwd -L
/var
[abi@localhost var]$ pwd -S
bash: pwd: -S: invalid option
pwd: usage: pwd [-LP]
[abi@localhost var]$ man pwd
[abi@localhost var]$ pwd -P
/var
[abi@localhost var]$ cd ..
[abi@localhost /]$ cd ~
[abi@localhost ~]$ man cd
[abi@localhost ~]$ man cd
[abi@localhost ~]$ cd /home
[abi@localhost home]$ cd /home/abi
[abi@localhost ~]$ pwd
/home/abi
[abi@localhost ~]$ cd ../../
[abi@localhost /]$ pwd
/
[abi@localhost /]$
```

Assignment: update you CentOS machine



ApplicationsPlacesTerminal

Thu 22:46

abi@localhost:/

FileEditViewSearchTerminalHelp

util-linux	x86_64	2.23.2-65.el7_9.1	updates	2.0 M
vim-common	x86_64	2:7.4.629-8.el7_9	updates	5.9 M
vim-enhanced	x86_64	2:7.4.629-8.el7_9	updates	1.1 M
vim-filesystem	x86_64	2:7.4.629-8.el7_9	updates	11 k
vim-minimal	x86_64	2:7.4.629-8.el7_9	updates	443 k
virt-what	x86_64	1.18-4.el7_9.1	updates	30 k
webkitgtk4	x86_64	2.28.2-3.el7	updates	28 M
webkitgtk4-jsc	x86_64	2.28.2-3.el7	updates	5.7 M
wpa_supplicant	x86_64	1:2.6-12.el7_9.2	updates	1.2 M
xfsdump	x86_64	3.1.7-2.el7_9	updates	308 k
xorg-x11-drv-ati	x86_64	19.0.1-3.el7_7	updates	166 k
xorg-x11-server-Xorg	x86_64	1.20.4-18.el7_9	updates	1.5 M
xorg-x11-server-common	x86_64	1.20.4-18.el7_9	updates	56 k
xz	x86_64	5.2.2-2.el7_9	updates	229 k
xz-libs	x86_64	5.2.2-2.el7_9	updates	103 k
zenity	x86_64	3.28.1-2.el7_9	updates	4.0 M
zlib	x86_64	1.2.7-20.el7_9	updates	90 k

Transaction Summary

=====

Install1 Package

Upgrade293 Packages

Total size: 556 M

Is this ok [y/d/N]:

abi@localhost:/

ApplicationsPlacesTerminal

Thu 22:48

abi@localhost:/

File Edit View Search Terminal Help

Is this ok [y/N]: y

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Updating

: 1:grub2-common-2.02-0.87.0.1.el7.centos.9.noarch

1/587

Updating

: centos-release-7-9.2009.1.el7.centos.x86_64

2/587

Updating

: 1:control-center-filesystem-3.28.1-8.el7_9.1.x86_64

3/587

Updating

: 32:bind-license-9.11.4-26.P2.el7_9.10.noarch

4/587

Updating

: 1:grub2-pc-modules-2.02-0.87.0.1.el7.centos.9.noarch

5/587

Updating

: kbd-misc-1.15.5-16.el7_9.noarch

6/587

Updating

: mesa-filesystem-18.3.4-12.el7_9.x86_64

7/587

Updating

: xorg-x11-server-common-1.20.4-18.el7_9.x86_64

8/587

Updating

: tzdata-java-2022d-1.el7.noarch

9/587

Updating

: firewalld-filesystem-0.6.3-13.el7_9.noarch

10/587

Updating

: 2:vim-filesystem-7.4.629-8.el7_9.x86_64

11/587

Updating

: tigervnc-license-1.8.0-22.el7.noarch

12/587

Updating

: kbd-legacy-1.15.5-16.el7_9.noarch

13/587

Updating

: libX11-common-1.6.7-4.el7_9.noarch

14/587

Updating

: tzdata-2022d-1.el7.noarch

15/587

Updating

: bash-4.2.46-35.el7_9.x86_64

16/587

Updating

: nss-softoken-freebl-3.79.0-4.el7_9.x86_64

17/587

Updating

: glibc-common-2.17-326.el7_9.x86_64

18/587

Updating

: glibc-2.17-326.el7_9.x86_64

19/587

abi@localhost:/

ApplicationsPlacesTerminal

Thu 22:55

abi@localhost:/

File Edit View Search Terminal Help

Cleanup

: expat-2.1.0-12.el7.x86_64

564/587

Cleanup

: libsmartcols-2.23.2-65.el7.x86_64

565/587

Cleanup

: libwebp-0.3.0-7.el7.x86_64

566/587

Cleanup

: mesa-libglapi-18.3.4-10.el7.x86_64

567/587

Cleanup

: libsndfile-1.0.25-12.el7.x86_64

568/587

Cleanup

: libldb-1.5.4-1.el7.x86_64

569/587

Cleanup

: 1:dmidecode-3.2-5.el7.x86_64

570/587

Cleanup

: kernel-tools-libs-3.10.0-1160.el7.x86_64

571/587

Cleanup

: 2:vim-minimal-7.4.629-7.el7.x86_64

572/587

Cleanup

: libsss_idmap-1.16.5-10.el7.x86_64

573/587

Cleanup

: libsss_nss_idmap-1.16.5-10.el7.x86_64

574/587

Cleanup

: 14:libpcap-1.5.3-12.el7.x86_64

575/587

Cleanup

: libexif-0.6.22-1.el7.x86_64

576/587

Cleanup

: libX11-common-1.6.7-2.el7.noarch

577/587

Cleanup

: centos-release-7-9.2009.0.el7.centos.x86_64

578/587

Cleanup

: 1:grub2-common-2.02-0.86.el7.centos.noarch

579/587

Cleanup

: 1:control-center-filesystem-3.28.1-7.el7.x86_64

580/587

Cleanup

: glibc-common-2.17-317.el7.x86_64

581/587

Cleanup

: bash-4.2.46-34.el7.x86_64

582/587

Cleanup

: nspr-4.21.0-1.el7.x86_64

583/587

Cleanup

: nss-util-3.44.0-4.el7_7.x86_64

584/587

Cleanup

: nss-softoken-freebl-3.44.0-8.el7_7.x86_64

585/587

Cleanup

: glibc-2.17-317.el7.x86_64

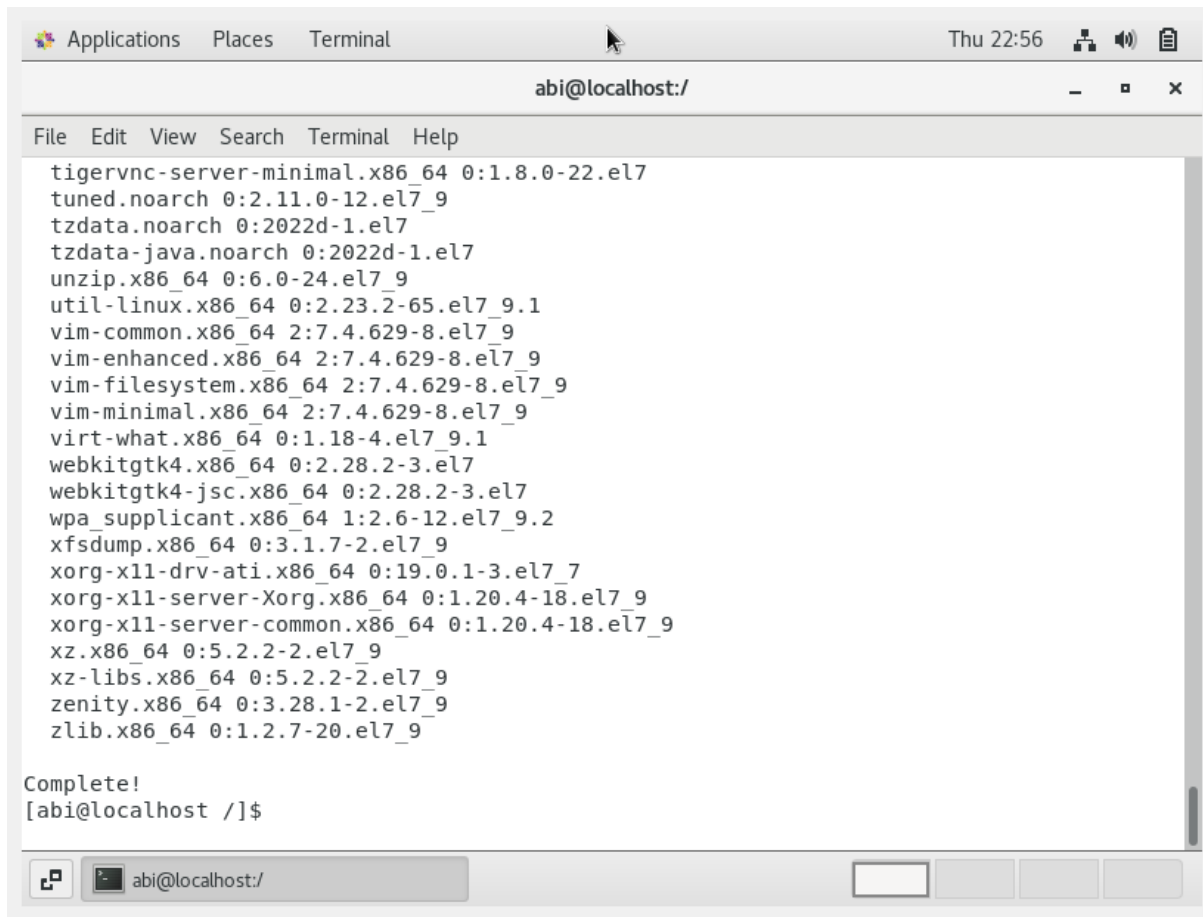
586/587

Cleanup

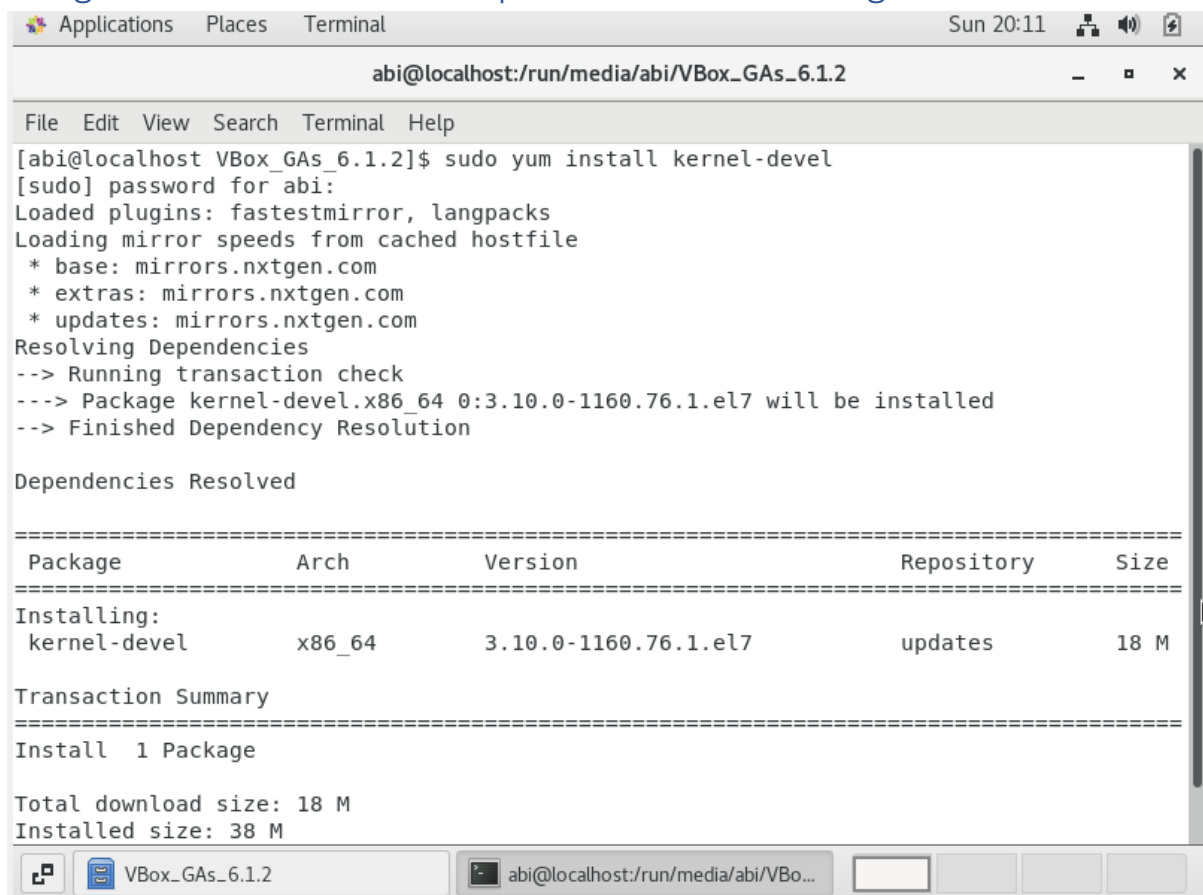
: tzdata-2020a-1.el7.noarch

587/587

abi@localhost:/



Assignment: Install all the dependencies for making centOS full screen



The image shows a terminal window titled 'abi@localhost:/run/media/abi/VBox_GAs_6.1.2'. The terminal output shows the command 'sudo yum install kernel-devel' being executed. The output includes the password prompt, the list of plugins (fastestmirror, langpacks), the loading of mirror speeds from a cached hostfile, the resolution of dependencies, and the transaction check. The transaction check shows that the package 'kernel-devel.x86_64 0:3.10.0-1160.76.1.el7' will be installed. The transaction summary shows that 1 package will be installed, with a total download size of 18 M and an installed size of 38 M.

```
[abi@localhost VBox_GAs_6.1.2]$ sudo yum install kernel-devel
[sudo] password for abi:
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirrors.nxtgen.com
* extras: mirrors.nxtgen.com
* updates: mirrors.nxtgen.com
Resolving Dependencies
--> Running transaction check
--> Package kernel-devel.x86_64 0:3.10.0-1160.76.1.el7 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch          Version                               Repository    Size
=====
Installing:
kernel-devel            x86_64        3.10.0-1160.76.1.el7                 updates      18 M
=====

Transaction Summary
=====
Install 1 Package

Total download size: 18 M
Installed size: 38 M
```

ApplicationsPlacesTerminal

Sun 20:16

abi@localhost:/run/media/abi/VBox_GAs_6.1.2

FileEditViewSearchTerminalHelp

Installing:

kernel-devel	x86_64	3.10.0-1160.76.1.el7	updates	18 M
--------------	--------	----------------------	---------	------

Transaction Summary

=====

Install 1 Package

Total download size: 18 M

Installed size: 38 M

Is this ok [y/d/N]: y

Downloading packages:

No Presto metadata available for updates

kernel-devel-3.10.0-1160.76.1.el7.x86_64.rpm | 18 MB 00:00:02

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing :	kernel-devel-3.10.0-1160.76.1.el7.x86_64	1/1
Verifying :	kernel-devel-3.10.0-1160.76.1.el7.x86_64	1/1

Installed:

kernel-devel.x86_64 0:3.10.0-1160.76.1.el7

Complete!

[abi@localhost VBox_GAs_6.1.2]\$

VBox_GAs_6.1.2

abi@localhost:/run/media/abi/VBo...

Applications Places Terminal

Sun 20:19

abi@localhost:run/media/abi/VBox_GAs_6.1.2

File Edit View Search Terminal Help

```
[abi@localhost VBox_GAs_6.1.2]$ sudo yum install gcc make perl
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirrors.nxtgen.com
* extras: mirrors.nxtgen.com
* updates: mirrors.nxtgen.com
Package 1:make-3.82-24.el7.x86_64 already installed and latest version
Package 4:perl-5.16.3-299.el7_9.x86_64 already installed and latest version
Resolving Dependencies
--> Running transaction check
--> Package gcc.x86_64 0:4.8.5-44.el7 will be installed
--> Processing Dependency: cpp = 4.8.5-44.el7 for package: gcc-4.8.5-44.el7.x86_64
--> Processing Dependency: glibc-devel >= 2.2.90-12 for package: gcc-4.8.5-44.el7.x86_64
4
--> Running transaction check
--> Package cpp.x86_64 0:4.8.5-44.el7 will be installed
--> Package glibc-devel.x86_64 0:2.17-326.el7_9 will be installed
--> Processing Dependency: glibc-headers = 2.17-326.el7_9 for package: glibc-devel-2.17-326.el7_9.x86_64
--> Processing Dependency: glibc-headers for package: glibc-devel-2.17-326.el7_9.x86_64
--> Running transaction check
--> Package glibc-headers.x86_64 0:2.17-326.el7_9 will be installed
--> Processing Dependency: kernel-headers >= 2.2.1 for package: glibc-headers-2.17-326.el7_9.x86_64
--> Processing Dependency: kernel-headers for package: glibc-headers-2.17-326.el7_9.x86_64
```

VBox_GAs_6.1.2

abi@localhost:run/media/abi/VBo...

ApplicationsPlacesTerminal

Sun 20:20

abi@localhost:/run/media/abi/VBox_GAs_6.1.2

FileEditViewSearchTerminalHelp

Total10 MB/s | 33 MB 00:03

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing : cpp-4.8.5-44.el7.x86_641/5

Installing : kernel-headers-3.10.0-1160.76.1.el7.x86_642/5

Installing : glibc-headers-2.17-326.el7_9.x86_643/5

Installing : glibc-devel-2.17-326.el7_9.x86_644/5

Installing : gcc-4.8.5-44.el7.x86_645/5

Verifying : glibc-headers-2.17-326.el7_9.x86_641/5

Verifying : gcc-4.8.5-44.el7.x86_642/5

Verifying : kernel-headers-3.10.0-1160.76.1.el7.x86_643/5

Verifying : glibc-devel-2.17-326.el7_9.x86_644/5

Verifying : cpp-4.8.5-44.el7.x86_645/5

Installed:

gcc.x86_64 0:4.8.5-44.el7

Dependency Installed:

cpp.x86_64 0:4.8.5-44.el7glibc-devel.x86_64 0:2.17-326.el7_9

glibc-headers.x86_64 0:2.17-326.el7_9kernel-headers.x86_64 0:3.10.0-1160.76.1.el7

Complete!

[abi@localhost VBox_GAs_6.1.2]\$

VBox_GAs_6.1.2

abi@localhost:/run/media/abi/VBo...

```
Applications  Places  Terminal  Sun 20:21
abi@localhost:/run/media/abi/VBox_GAs_6.1.2
File Edit View Search Terminal Help
Installed:
gcc.x86_64 0:4.8.5-44.el7

Dependency Installed:
cpp.x86_64 0:4.8.5-44.el7      glibc-devel.x86_64 0:2.17-326.el7_9
glibc-headers.x86_64 0:2.17-326.el7_9  kernel-headers.x86_64 0:3.10.0-1160.76.1.el7

Complete!
[abi@localhost VBox_GAs_6.1.2]$ sudo ./VBoxLinuxAdditions.run
Verifying archive integrity... All good.
Uncompressing VirtualBox 6.1.2 Guest Additions for Linux.....
VirtualBox Guest Additions installer
Removing installed version 6.1.2 of VirtualBox Guest Additions...
Copying additional installer modules ...
Installing additional modules ...
VirtualBox Guest Additions: Starting.
VirtualBox Guest Additions: Building the VirtualBox Guest Additions kernel
modules. This may take a while.
VirtualBox Guest Additions: To build modules for other installed kernels, run
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup <version>
VirtualBox Guest Additions: or
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup all
VirtualBox Guest Additions: Building the modules for kernel
3.10.0-1160.76.1.el7.x86_64.
```

Applications Places Terminal Sun 20:24

abi@localhost:/run/media/abi/VBox_GAs_6.1.2

File Edit View Search Terminal Help

```
Dependency Installed:
  cpp.x86_64 0:4.8.5-44.el7          glibc-devel.x86_64 0:2.17-326.el7_9
  glibc-headers.x86_64 0:2.17-326.el7_9 kernel-headers.x86_64 0:3.10.0-1160.76.1.el7

Complete!
[abi@localhost VBox_GAs_6.1.2]$ sudo ./VBoxLinuxAdditions.run
Verifying archive integrity... All good.
Uncompressing VirtualBox 6.1.2 Guest Additions for Linux.....
VirtualBox Guest Additions installer
Removing installed version 6.1.2 of VirtualBox Guest Additions...
Copying additional installer modules ...
Installing additional modules ...
VirtualBox Guest Additions: Starting.
VirtualBox Guest Additions: Building the VirtualBox Guest Additions kernel
modules. This may take a while.
VirtualBox Guest Additions: To build modules for other installed kernels, run
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup <version>
VirtualBox Guest Additions: or
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup all
VirtualBox Guest Additions: Building the modules for kernel
3.10.0-1160.76.1.el7.x86_64.

[abi@localhost VBox_GAs_6.1.2]$
[abi@localhost VBox_GAs_6.1.2]$
```

VBox_GAs_6.1.2 abi@localhost:/run/media/abi/VBo...

Applications Places Terminal Sun 20:25

abi@localhost:/run/media/abi/VBox_GAs_6.1.2

File Edit View Search Terminal Help

```
Dependency Installed:
  cpp.x86_64 0:4.8.5-44.el7          glibc-devel.x86_64 0:2.17-326.el7_9
  glibc-headers.x86_64 0:2.17-326.el7_9 kernel-headers.x86_64 0:3.10.0-1160.76.1.el7

Complete!
[abi@localhost VBox_GAs_6.1.2]$ sudo ./VBoxLinuxAdditions.run
Verifying archive integrity... All good.
Uncompressing VirtualBox 6.1.2 Guest Additions for Linux.....
VirtualBox Guest Additions installer
Removing installed version 6.1.2 of VirtualBox Guest Additions...
Copying additional installer modules ...
Installing additional modules ...
VirtualBox Guest Additions: Starting.
VirtualBox Guest Additions: Building the VirtualBox Guest Additions kernel
modules. This may take a while.
VirtualBox Guest Additions: To build modules for other installed kernels, run
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup <version>
VirtualBox Guest Additions: or
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup all
VirtualBox Guest Additions: Building the modules for kernel
3.10.0-1160.76.1.el7.x86_64.

[abi@localhost VBox_GAs_6.1.2]$
[abi@localhost VBox_GAs_6.1.2]$ reboot
```

VBox_GAs_6.1.2 abi@localhost:/run/media/abi/VBo...

