



## 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?

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

A screenshot of a Linux terminal window running inside an Oracle VM VirtualBox. The window title is "VM1 [Running] - Oracle VM VirtualBox". The terminal shows the user "administrator@localhost" at the prompt. The user enters the command "passwd". The terminal output shows the process of changing the password for the user "administrator". It prompts for the current UNIX password, then the new password, and then to retype the new password. The first attempt is successful, displaying "passwd: all authentication tokens updated successfully.". The user then enters the command "passwd" again. The terminal output shows the process of changing the password for the user "administrator". It prompts for the current UNIX password, then the new password, and then to retype the new password. The second attempt fails with the message "BAD PASSWORD: The password is shorter than 8 characters". The user enters the command "passwd" a third time. The terminal output shows the process of changing the password for the user "administrator". It prompts for the current UNIX password, then the new password, and then to retype the new password. The third attempt fails with the message "BAD PASSWORD: No password supplied". The user enters the command "passwd" a fourth time. The terminal output shows the process of changing the password for the user "administrator". It prompts for the current UNIX password, then the new password, and then to retype the new password. The fourth attempt fails with the message "passwd: Have exhausted maximum number of retries for service". The user enters the command "passwd" a fifth time. The terminal output shows the process of changing the password for the user "administrator". It prompts for the current UNIX password, then the new password, and then to retype the new password. The fifth attempt fails with the message "passwd: Authentication token manipulation error". The terminal prompt is now "[administrator@localhost ~]\$".

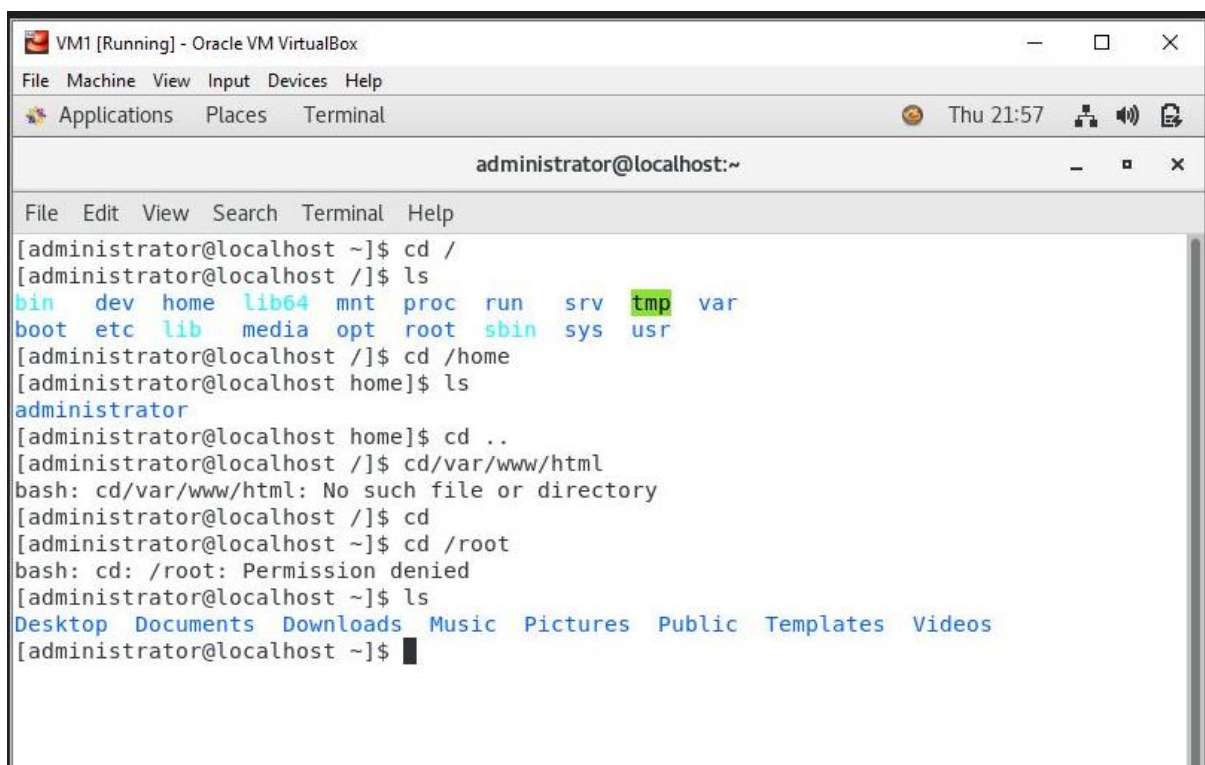
```
VM1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal Thu 22:45
administrator@localhost:~
File Edit View Search Terminal Help
[administrator@localhost ~]$ passwd
Changing password for user administrator.
Changing password for administrator.
(current) UNIX password:
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[administrator@localhost ~]$ passwd
Changing password for user administrator.
Changing password for administrator.
(current) UNIX password:
New password:
BAD PASSWORD: The password is shorter than 8 characters
New password:
BAD PASSWORD: The password is shorter than 8 characters
New password:
BAD PASSWORD: No password supplied
passwd: Have exhausted maximum number of retries for service
[administrator@localhost ~]$ passwd
Changing password for user administrator.
Changing password for administrator.
(current) UNIX password:
passwd: Authentication token manipulation error
[administrator@localhost ~]$
```

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

### 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?
- Enter the command now **cd /home** and then hit **Enter** key
  - Do **ls**, provide screenshot and explain what is **/home** directory used for?
- Enter **cd ..** and hit **Enter** key [ *Note: here we have space after cd then use double dot* ]
  - Check what happen and give screenshot?
- Now enter **cd /var/www/html** and then type **cd** and hit **Enter** key
  - Explain what happen and give screenshot?
- Now type **cd /root** and then hit **Enter** key
  - Do **ls**, check any output we have on screen if yes then take screenshot?



```

VM1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal Thu 21:57
administrator@localhost:~

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

- Then type **ls -al** and hit **Enter** key
  - Take screenshot and explain what new file or directory you found?
- Then use **ls -i** and hit **Enter** key
  - Now see what different output its shows and take screenshot?
- Then use **ls --help** and see other options about **ls** command
  - Explore it and try with other attribute we can use with **ls** command

The screenshot shows a terminal window titled "VM1 [Running] - Oracle VM VirtualBox". The terminal is running as "administrator@localhost:/etc". The user has entered the command `cd /etc` and then `ls`. The output displays a list of files and directories in the `/etc` directory, including `abrt`, `adjtime`, `aliases`, `aliases.db`, `alsa`, `alternatives`, `anacrontab`, `asound.conf`, `at.deny`, `audisp`, `audit`, `avahi`, `bash_completion.d`, `bashrc`, `binfmt.d`, `bluetooth`, `brltty`, `brltty.conf`, `centos-release`, `centos-release-upstream`, `chkconfig.d`, `chrony.conf`, `chrony.keys`, `cifs-utils`, `hosts.allow`, `hosts.deny`, `hp`, `idmapd.conf`, `init.d`, `inittab`, `inputrc`, `iproute2`, `ipsec.conf`, `ipsec.d`, `ipsec.secrets`, `iscsi`, `issue`, `issue.net`, `java`, `jvm`, `jvm-common`, `kdump.conf`, `kernel`, `krb5.conf`, `krb5.conf.d`, `ksmtuned.conf`, `ld.so.cache`, `ld.so.conf`, `profile`, `profile.d`, `protocols`, `pulse`, `purple`, `python`, `qemu-ga`, `qemu-kvm`, `radvd.conf`, `ras`, `rc0.d`, `rc1.d`, `rc2.d`, `rc3.d`, `rc4.d`, `rc5.d`, `rc6.d`, `rc.d`, `rc.local`, `rdma`, `redhat-release`, `request-key.conf`, `request-key.d`, and `resolv.conf`.

VM1 [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Applications Places Terminal Thu 22:01

administrator@localhost:~

File Edit View Search Terminal Help

```
[administrator@localhost ~]$ ls -al
total 32
drwx-----. 15 administrator administrator 4096 Oct 20 18:30 .
drwxr-xr-x.  3 root          root        27 Oct 20 13:48 ..
-rw-----.  1 administrator administrator  511 Oct 20 22:00 .bash_history
-rw-r--r--.  1 administrator administrator   18 Apr  1  2020 .bash_logout
-rw-r--r--.  1 administrator administrator  193 Apr  1  2020 .bash_profile
-rw-r--r--.  1 administrator administrator  231 Apr  1  2020 .bashrc
drwx-----. 14 administrator administrator 4096 Oct 20 13:52 .cache
drwxr-xr-x. 14 administrator administrator  261 Oct 20 13:53 .config
drwx-----.  3 administrator administrator   25 Oct 20 13:50 .dbus
drwxr-xr-x.  3 administrator administrator   21 Oct 20 18:16 Desktop
drwxr-xr-x.  2 administrator administrator    6 Oct 20 13:50 Documents
drwxr-xr-x.  2 administrator administrator    6 Oct 20 13:50 Downloads
-rw-----.  1 administrator administrator   16 Oct 20 13:50 .esd_auth
-rw-----.  1 administrator administrator  310 Oct 20 13:50 .ICEauthority
drwx-----.  3 administrator administrator   19 Oct 20 13:50 .local
drwxr-xr-x.  4 administrator administrator   39 Oct 20 13:42 .mozilla
drwxr-xr-x.  2 administrator administrator    6 Oct 20 13:50 Music
drwxr-xr-x.  2 administrator administrator    6 Oct 20 13:50 Pictures
drwxr-xr-x.  2 administrator administrator    6 Oct 20 13:50 Public
drwxr-xr-x.  2 administrator administrator    6 Oct 20 13:50 Templates
drwxr-xr-x.  2 administrator administrator    6 Oct 20 13:50 Videos
[administrator@localhost ~]$
```

administrator@localhost:~

Right Ctrl

VM1 [Running] - Oracle VM VirtualBox

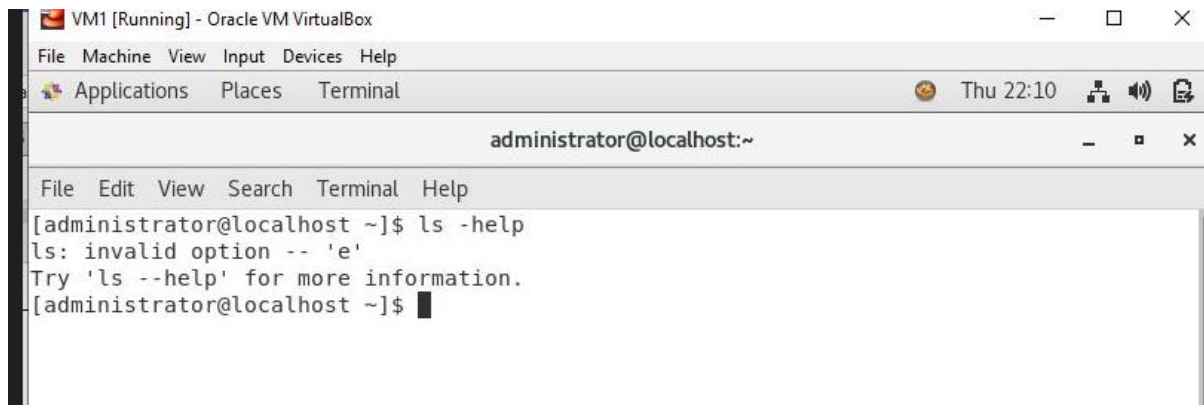
File Machine View Input Devices Help

Applications Places Terminal Thu 22:07

administrator@localhost:~

File Edit View Search Terminal Help

```
[administrator@localhost ~]$ ls -li
 80131 Desktop      18049874 Downloads 33593483 Pictures 33593482 Templates
 80132 Documents    18049875 Music    52035998 Public   52035999 Videos
[administrator@localhost ~]$
```



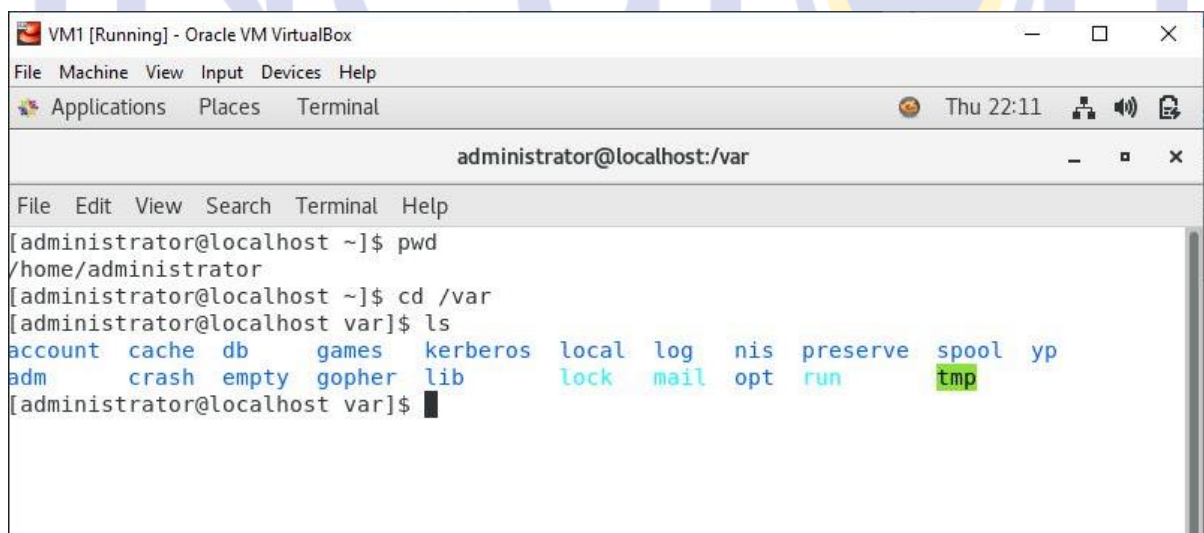
```
VM1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal
Thu 22:10
administrator@localhost:~
File Edit View Search Terminal Help
[administrator@localhost ~]$ ls -help
ls: invalid option -- 'e'
Try 'ls --help' for more information.
[administrator@localhost ~]$
```

## 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
- Now use **cd /var** and hit **Enter** key
  - Do **ls**, and see what output comes, give screenshot?
- Do explore other help options of each command to learn more other things we can do with these commands



```
VM1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal
Thu 22:11
administrator@localhost:/var
File Edit View Search Terminal Help
[administrator@localhost ~]$ pwd
/home/administrator
[administrator@localhost ~]$ cd /var
[administrator@localhost var]$ ls
account  cache  db      games  kerberos  local  log  nis  preserve  spool  yp
adm      crash  empty  gopher lib       lock  mail opt  run      tmp
```