

Module 4 Linux Essentials

TASK 4.3

After you have logged into the system, do the following.

1. Invoke **pwd** to see your current working directory (there should be your home directory).

2. Collect output of these commands

ls -l / — show catalog “-l” long listing format “/” root directory of file system

ls — show catalog in current directory

ls ~ — show catalog “~” home directory

ls -l — show catalog “-l” long listing in current directory

ls -a — show catalog “-a” or “—all” do not ignore entries starting with in current directory

ls -la — show catalog “-l” long listing format “-a” or “—all” do not ignore entries starting with in current directory

ls -lda ~ show catalog “-l” long listing format “-d” or “—directory” list directories themselves, not their contents “-a” or “—all” do not ignore entries starting with in current directory

```
[ec2-user@ip-172-31-38-56 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-38-56 ~]$ ls -l /
total 16
lrwxrwxrwx 1 root root 7 Apr 7 01:50 bin -> usr/bin
dr-xr-xr-x 4 root root 4096 Apr 7 01:51 boot
drwxr-xr-x 15 root root 2820 Apr 15 19:39 dev
drwxr-xr-x 80 root root 8192 Apr 15 19:39 etc
drwxr-xr-x 3 root root 22 Apr 15 19:39 home
lrwxrwxrwx 1 root root 7 Apr 7 01:50 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Apr 7 01:50 lib64 -> usr/lib64
drwxr-xr-x 2 root root 6 Apr 7 01:50 local
drwxr-xr-x 2 root root 6 Apr 9 2019 media
drwxr-xr-x 2 root root 6 Apr 9 2019 mnt
drwxr-xr-x 4 root root 27 Apr 7 01:51 opt
dr-xr-xr-x 95 root root 0 Apr 15 19:39 proc
dr-xr-x--- 3 root root 103 Apr 15 19:39 root
drwxr-xr-x 27 root root 960 Apr 17 02:46 run
lrwxrwxrwx 1 root root 8 Apr 7 01:50 sbin -> usr/sbin
drwxr-xr-x 2 root root 6 Apr 9 2019 srv
dr-xr-xr-x 13 root root 0 Apr 17 12:37 sys
drwxrwxrwt 8 root root 172 Apr 17 03:13 tmp
drwxr-xr-x 13 root root 155 Apr 7 01:50 usr
drwxr-xr-x 19 root root 269 Apr 15 19:39 var
[ec2-user@ip-172-31-38-56 ~]$ ls
[ec2-user@ip-172-31-38-56 ~]$ ls ~
[ec2-user@ip-172-31-38-56 ~]$ ls -l
total 0
[ec2-user@ip-172-31-38-56 ~]$ ls -a
. .. .bash_history .bash_logout .bash_profile .bashrc .ssh
[ec2-user@ip-172-31-38-56 ~]$ ls -la
total 16
drwx----- 3 ec2-user ec2-user 95 Apr 15 20:07 .
drwxr-xr-x 3 root root 22 Apr 15 19:39 ..
-rw----- 1 ec2-user ec2-user 370 Apr 15 22:02 .bash_history
-rw-r--r-- 1 ec2-user ec2-user 18 Jan 16 00:56 .bash_logout
-rw-r--r-- 1 ec2-user ec2-user 193 Jan 16 00:56 .bash_profile
-rw-r--r-- 1 ec2-user ec2-user 231 Jan 16 00:56 .bashrc
drwx----- 2 ec2-user ec2-user 29 Apr 15 19:39 .ssh
[ec2-user@ip-172-31-38-56 ~]$ ls -lds ~
0 drwx----- 3 ec2-user ec2-user 95 Apr 15 20:07 /home/ec2-user
[ec2-user@ip-172-31-38-56 ~]$ ls -lda ~
drwx----- 3 ec2-user ec2-user 95 Apr 15 20:07 /home/ec2-user
[ec2-user@ip-172-31-38-56 ~]$
```

Note differences between produced outputs. Describe (in few words) purposes of these commands.

3. Execute and describe the following commands (store the output, if any):

mkdir test - create directory test

cd test - go to directory test

pwd - print working directory

touch test.txt - create file test.txt

ls -l test.txt - show catalog “-l” long listing format “test.txt” destination file name

mkdir test2 - create directory test2

mv test.txt test2 - move file test.txt to directory test2 destroy original - cut)

cd test2 - go to directory test2

ls - show catalog

mv test.txt test2.txt - move file test.txt to file test2.txt (destroy original - cut)

ls - show catalog

cp test2.txt .. - copy test2.txt to the directory one level above the current working directory (save original)

cd .. - go to the directory one level above the current working directory

ls - show catalog

rm test2.txt - delete file test2.txt

rmdir test2 - delete directory test2

```
[ec2-user@ip-172-31-38-56 ~]$ mkdir test
[ec2-user@ip-172-31-38-56 ~]$ cd test
[ec2-user@ip-172-31-38-56 test]$ pwd
/home/ec2-user/test
[ec2-user@ip-172-31-38-56 test]$ touch test.txt
[ec2-user@ip-172-31-38-56 test]$ ls -l test.txt
-rw-rw-r-- 1 ec2-user ec2-user 0 Apr 17 12:57 test.txt
[ec2-user@ip-172-31-38-56 test]$ mkdir test2
[ec2-user@ip-172-31-38-56 test]$ mv test.txt test2
[ec2-user@ip-172-31-38-56 test]$ cd test2/
[ec2-user@ip-172-31-38-56 test2]$ ls
test.txt
[ec2-user@ip-172-31-38-56 test2]$ mv test.txt test2.txt
[ec2-user@ip-172-31-38-56 test2]$ ls
test2.txt
[ec2-user@ip-172-31-38-56 test2]$ cp test2.txt ..
[ec2-user@ip-172-31-38-56 test2]$ cd ..
[ec2-user@ip-172-31-38-56 test]$ ls
test2  test2.txt
[ec2-user@ip-172-31-38-56 test]$ rm test2
test2/  test2.txt
[ec2-user@ip-172-31-38-56 test]$ rm test2.txt
[ec2-user@ip-172-31-38-56 test]$ rmdir test2/
rmdir: failed to remove 'test2/': Directory not empty
[ec2-user@ip-172-31-38-56 test]$ rm test2/test2.txt
[ec2-user@ip-172-31-38-56 test]$ rmdir test2/
[ec2-user@ip-172-31-38-56 test]$ ls
[ec2-user@ip-172-31-38-56 test]$
```

4. Execute and describe the difference

cat /etc/fstab — displays file contents in fine in command line out

```
[ec2-user@ip-172-31-38-56 test]$ cat /etc/fstab
#
UUID=55da5202-8008-43e8-8ade-2572319d9185    /                xfs      defaults,noatime 1    1
```

less /etc/fstab — displays file contents or command output one page at a time in your terminal

```
#
UUID=55da5202-8008-43e8-8ade-2572319d9185    /                xfs      defaults,noatime 1    1
/etc/fstab (END)
```

more /etc/fstab — displays text files in the command prompt, displaying one screen at a time in case the file is large

```
[ec2-user@ip-172-31-38-56 test]$ more /etc/fstab
#
UUID=55da5202-8008-43e8-8ade-2572319d9185    /                xfs      defaults,noatime 1    1
[ec2-user@ip-172-31-38-56 test]$ █
```

5. Add to archive all 'test' directories.

a. to the pure 'tar';

b. to the zipped 'tar' with only tar command;

c. to the zipped 'tar' with gzip command;

extract from archives all above.

5. Look through man pages of the listed above commands.