

# **BIG DATA TECHNOLOGIES LAB**

**(ACADEMIC YEAR : 2017-2018)**

**I SEMESTER**

## **ASSIGNMENT 1**

### **TOPIC : LINUX COMMANDS**

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1. Find out the username/userid on your machine.

**Ans: [root@localhost home]# whoami**

2. How to print the present working directory path?

**Ans: PWD**

3. How to go to a given directory (change the directory)?

**Ans: cd /directory\_path**

4. What is the command to view the information about a Linux/Unix command? Try to know about the commands “ls”.

**Ans: Shows the listed files and folders in the current directory.**

**MAN used to see details about that commands**

5. View the man page for command ‘id’ and find the options for printing all the groups associated to a user with name.

**Ans: id -G**

6. Create a file called “ctest”. Modify the access permissions as: “user - rwx”, “group - rx”, and “others - nothing”.

**Ans: mkdir ctest**

7. Create a 3 level directory in your home directory as shown in the structure below with single command.

mydir

|

Cd /home

Mkdir mydir

Subdir1

Cd mydir

Mkdir subdir

Subdir2

Ans: cd subdir2

Mkdir subdir2

Now move the whole directory i.e. mydir to mydir1 and change the permissions as owner-rwx, group-rx, others-x.

**Ans: mkdir -p /mydir/subdir1/subdir2**

**[root@localhost subdir]# ls -g**

total 0

drwxrw----. 3 root 20 Dec 18 10:55 mydir

[root@localhost subdir]#

[root@localhost home]# ls -g acts.txt

-rw-r--r--. 1 root 195 Dec 18 11:05 acts.txt

[root@localhost home]# chmod 760 a.txt

[root@localhost home]# ls -g a.txt

-rwxrw----. 1 root 0 Dec 18 11:00 a.txt

[root@localhost home]# mv subdir mkdir1

[root@localhost home]# ls

```
acts.txt a.txt master mkdir1
```

```
[root@localhost home]# ls -g mkdir
```

```
ls: cannot access mkdir: No such file or directory
```

```
[root@localhost home]# cd mkdir1
```

```
[root@localhost mkdir1]# ls -g
```

```
total 0
```

```
total 8
```

```
-rw-r--r--. 1 root 195 Dec 18 11:05 acts.txt
```

```
-rwxrw----. 1 root 0 Dec 18 11:00 a.txt
```

```
drwx-----. 14 master 4096 Dec 15 14:24 master
```

```
drwxrw----. 3 root 19 Dec 18 11:32 mkdir1
```

8 Create a text file using an editor with content as:

Simple to understand and work.

Many os are based on LINUX.

All linux OS are open source and freely available.

a) From the file get the count of word “Linux” it must also include LINUX while counting.

```
Ans: [root@localhost home]# grep -ic 'Linux' acts.txt
```

```
3
```

b) Display lines that exactly have the word ‘OS’.

```
Ans: [root@localhost home]# grep -c 'OS' acts.txt
```

```
2
```

c) Display the line number where appears word ‘Linux’ irrespective of case

**Ans: [root@localhost home]# grep -n 'Linux' acts.txt**

2:First day is about Linux.

9. Create sample files ending with “.txt” in your directory. Now run a command to list all the files ending with “txt”.

**Ans: [root@localhost home]# find \*.txt**

abc.txt

acts.txt

a.txt

10. Create a file “test” in the directory /home/cdac/mydir1/subdir1/test. Go to the home directory and now find the file “test” executing the appropriate command.

**Ans: ind: ‘test’: No such file or directory**

**[root@localhost home]# find -name test**

**./cdac/mkdir1/subdir/mydir/subdir2/test**

11. From home directory list all the files including the hidden files.

**Ans: [root@localhost home]# find \***

abc.txt

acts.txt

a.txt

cdac

cdac/mkdir1

cdac/mkdir1/subdir

cdac/mkdir1/subdir/mydir

cdac/mkdir1/subdir/mydir/subdir2

cdac/mkdir1/subdir/mydir/subdir2/test

master

master/.mozilla

master/.mozilla/firefox/profiles.ini

master/.bash\_logout

master/.bash\_profile

master/.bashrc

master/.config

master/.config/imsettings

master/.config/user-dirs.dirs

master/.config/user-dirs.locale

master/.config/gnome-session

master/.config/gnome-session/saved-session

master/.config/pulse

master/.config/pulse/cookie

master/.config/pulse/6e59fe2995ea46eba32300bb50cf2d42-device-volumes.tdb

master/.config/pulse/6e59fe2995ea46eba32300bb50cf2d42-stream-volumes.tdb

master/.local/share/evolution/mail

12. Create a file with the following content:

You absolutely must run these exercises in the bash shell, or results will not be as expected.

1. Display first 2 lines from the file.

**Ans: [root@localhost home]# sed -n '1,2p' acts.txt**

Welcome to ACTS courses.

First day is about Linux.

2. Display last 2 lines from the file.

**Ans: [root@localhost home]# tail -2 demo.txt**

expected.

3. Display exactly the tenth line in the file.

**[root@localhost home]# head -n 10 d.txt | tail -n 1**

**hsfshsdf**

**[root@localhost home]# sed -n '10,10p' d.txt**

**hsfshsdf**

13. Create a set of 3 files and tar them to myfirst.tar. Untar the tar file myfirst.tar and check the extracted files.

**Ans: [root@localhost tar]# cd tarfiles**

[root@localhost tarfiles]# ls

tar2 tar3

[root@localhost tarfiles]# mkdir tar 1

[root@localhost tarfiles]# ld

ld: no input files

[root@localhost tarfiles]# ld

ld: no input files

[root@localhost tarfiles]# ls

1 tar tar2 tar3

**[root@localhost tarfiles]# tar -zcvf TARFILES1 tarfiles**

tar: tarfiles: Cannot stat: No such file or directory

tar: Exiting with failure status due to previous errors

```
[root@localhost tarfiles]# tar -zcvf TARFILES1 tar
```

```
tar/
```

```
[root@localhost tarfiles]# ls
```

```
1 tar tar2 tar3 TARFILES1
```

```
[root@localhost tarfiles]#
```

```
[root@localhost tarfiles]# tar -zcvf TARFILES2.tar tar tar2 tar3
```

```
tar/
```

```
tar2/
```

```
tar3/
```

```
[root@localhost tarfiles]# ls
```

```
1 tar tar2 tar3 TARFILES1 TARFILES2.tar
```