

**NETWORKING & SYSTEM ADMINISTRATION LAB****Experiment No.: 4****Aim**

Learn basic Linux commands.

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**Roll No: 20**

**Batch: A**

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**Procedure****1. pwd (Print Working Directory)**

To find out the path of the current working directory (folder) you're in.

**2. history**

To review the commands you have entered before. command number to run a command from history.

**3. man**

This will show the manual instruction of the command.

Eg: man pwd

**4. cd**

To navigate through the Linux files and directories.

- cd .. (with two dots) to move one directory up
- cd to go straight to the home folder
- cd- (with a hyphen) to move to your previous directory

**5. ls**

The ls command is used to view the contents of a directory. By default, this command will display the contents of your current working directory.

- ls -R will list all the files in the sub-directories as well
- ls -l – long listing
- ls -a will show the hidden files
- ls -al will list the files and directories with detailed information like the permissions, size, owner, etc.
- ls -t lists files sorted in the order of “last modified”

- `ls -r` option will reverse the natural sorting order. Usually used in combination with other switches such as `ls -tr`. This will reverse the time-wise listing.

## 6. **mkdir**

Use `mkdir` command to make a new directory. Use the `p` (parents) option to create a directory in between two existing directories.

## 7. **rmdir**

If you need to delete a directory, use the `rmdir` command. However, `rmdir` only allows you to delete empty directories.

## 8. **touch**

The `touch` command allows you to create a blank new file through the Linux command line.

## 9. **rm**

The `rm` command is used to delete directories and the contents within them. If you only want to delete the directory — as an alternative to `rmdir` — use `rm -r`.

## Output Screenshot

```

student@U20:~/documents/ALLEN$ pwd
/home/student/documents/ALLEN
student@U20:~/documents/ALLEN$ history
1 clear
2 java -version
3 sudo apt install openjdk-8-jre-headless
4 java -version
5 nano allen.java
6 ls
7 cd Desktop/
8 javac allen.java
9 sudo apt install openjdk-11-jdk-headless
10 javac allen.java
11 java HelloWorld
12 touch 1.txt
13 touch 2.txt
14 touch 2.txt
15 clear
16 pwd
17 history
18 16
19 17
20 clear
21 pwd
22 history
23 pwd
24 man ls
25 ls -R
26 ls -l
27 pwd
28 history
student@U20:~/documents/ALLEN$ 127
pwd
/home/student/documents/ALLEN
student@U20:~/documents/ALLEN$ man ls
student@U20:~/documents/ALLEN$ ls -R
.
1.txt 2.txt
student@U20:~/documents/ALLEN$ ls -l
total 0
-rw-rw-r-- 1 student student 0 Mar 29 2022 1.txt
-rw-rw-r-- 1 student student 0 Mar 29 2022 2.txt
student@U20:~/documents/ALLEN$ ls -t
2.txt 1.txt
student@U20:~/documents/ALLEN$ ls -r
2.txt 1.txt
student@U20:~/documents/ALLEN$ mkdir newFolder
student@U20:~/documents/ALLEN$ mkdir -p asp/and/abc
student@U20:~/documents/ALLEN$ touch abc.txt
student@U20:~/documents/ALLEN$ touch newFolder/abc.txt
student@U20:~/documents/ALLEN$ cd newFolder/

```

```

LS(1)                                User Commands                                LS(1)
NAME
ls - list directory contents
SYNOPSIS
ls [OPTION]... [FILE]...
DESCRIPTION
List information about the FILES (the current directory by default).
Sort entries alphabetically if none of -ftuvSUX nor --sort is speci-
fied.
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
with -l, scale sizes by SIZE when printing them; e.g.,
"--block-size=M"; 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 'always' (default if omitted),
'auto', or 'never'; 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 -u, disable -ls --color
-F, --classify
Manual page ls(1) \line 1 (press h for help or q to quit)

```

```
Activities Terminal Mar 25 14:52
student
Trash
18 ls
19 ls
20 clear
21 pwd
22 history
23 pwd
24 man ls
25 ls -R
26 ls -l
27 pwd
28 history
student@u20:~/Documents/ALLEN$ 127
pwd
/home/student/Documents/ALLEN
student@u20:~/Documents/ALLEN$ man ls
student@u20:~/Documents/ALLEN$ ls -R
.
1.txt 2.txt
student@u20:~/Documents/ALLEN$ ls -l
total 0
-rw-r--r-- 1 student student 0 Mar 29 2022 1.txt
-rw-r--r-- 1 student student 0 Mar 29 2022 2.txt
student@u20:~/Documents/ALLEN$ ls -t
2.txt 1.txt
student@u20:~/Documents/ALLEN$ ls -r
2.txt 1.txt
student@u20:~/Documents/ALLEN$ mkdir newfolder
student@u20:~/Documents/ALLEN$ mkdir -p asp/asd/abc
student@u20:~/Documents/ALLEN$ touch abc.txt
student@u20:~/Documents/ALLEN$ touch newfolder/abc.txt
student@u20:~/Documents/ALLEN$ cd newfolder/
student@u20:~/Documents/ALLEN/newfolder$ touch newfile.txt
student@u20:~/Documents/ALLEN/newfolder$ cd ..
student@u20:~/Documents/ALLEN$ cd ..
student@u20:~/Documents$ pwd
/home/student/Documents
student@u20:~/Documents$ ls -a
. . . ALLEN
student@u20:~/Documents$ ls -al
total 12
drwxr-xr-x 3 student student 4096 Mar 29 2022 .
drwxr-xr-x 16 student student 4096 Mar 28 2022 ..
drwxr-xr-x 4 student student 4096 Mar 25 14:46 ALLEN
student@u20:~/Documents$ cd ALLEN/
student@u20:~/Documents/ALLEN$ ls newfolder/
abc.txt newfile.txt
student@u20:~/Documents/ALLEN$ cd ../
student@u20:~/Documents$ cd ../..
student@u20:~/home$ ls
student
student@u20:~/home$
```