

# Assignment (Linux Commands)

- Networking & System Administration Lab

Submitted to,

Meera Rose Mathew

Submitted by,

Anjali C Abraham

Roll No : 18

MCA Batch A

Submitted on :14-06-2021

# Linux Commands

- 1) **pwd** : stands for Print Working Directory. It prints the path of the working directory, starting from the root.

```
kunjuzz@kunjuzz-VirtualBox:~$ pwd
/home/kunjuzz
```

- 2) **history** : used to view the previously executed command.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ history
```

```
 1  pwd
 2  man
 3  man man
 4  pwd
 5  man man
 6  ls
 7  ls -R
 8  ls -l
 9  ls -a
10  ls -t
11  ls --
12  ls -l
13  ls -lh
14  ls -i
15  cd Documents
16  pwd
17  cd ~
18  cd Music/
19  cd ..
20  cd Documents
21  mkdir files
22  ls
23  mkdir -v
24  mkdir files/file1
25  cd files
26  ls
27  rmdir file1
28  ls
29  cd ..
30  ls
31  touch file1.txt
32  cat file2.txt
33  cat > file2.txt
34  cat file2.txt
35  touch file3.txt file4.txt
36  ls
37  cd file3.txt
38  cat > file3.txt
39  cat file2.txt file3.txt
40  cat file2.txt file3.txt > file4.txt
41* cat file4.txt
42  cat file2.txt|tr A-Z
43  cat file2.txt|tr a-z
44  cat file2.txt|tr a-z A-Z
45  cat file2.txt|tr A-Z a-z
46  rm file1.txt
47  ls
48  history
```

- !command number to run a command from history

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ !31
touch file1.txt
```

- 3) **man** : used to display the user manual of any command that we can run on the terminal.

```
9 Kernel routines [Non standard]

A manual page consists of several sections.

Conventional section names include NAME, SYNOPSIS, CONFIGURATION, DE-
SCRIPTION, OPTIONS, EXIT STATUS, RETURN VALUE, ERRORS, ENVIRONMENT,
FILES, VERSIONS, CONFORMING TO, NOTES, BUGS, EXAMPLE, AUTHORS, and
SEE ALSO.

The following conventions apply to the SYNOPSIS section and can be
used as a guide in other sections.

bold text           type exactly as shown.
italic text         replace with appropriate argument.
[-abc]              any or all arguments within [ ] are optional.
-a|-b              options delimited by | cannot be used together.
argument ...       argument is repeatable.
[expression] ...   entire expression within [ ] is repeatable.

Exact rendering may vary depending on the output device. For in-
stance, man will usually not be able to render italics when running in
a terminal, and will typically use underlined or coloured text in-
stead.

The command or function illustration is a pattern that should match
all possible invocations. In some cases it is advisable to illustrate
several exclusive invocations as is shown in the SYNOPSIS section of
this manual page.
```

```
Manual page man(1) line 36 (press h for help or q to quit)
```

- 4) **ls** : the list command in Linux. It will show the full list or content of your directory.

```
kunjuzz@kunjuzz-VirtualBox:~$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
```

- **ls -l** : It will show the list in a long list format.

```
kunjuzz@kunjuzz-VirtualBox:~$ ls -l
total 32
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun  2 18:24 Desktop
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun  2 18:24 Documents
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun  2 18:24 Downloads
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun  2 18:24 Music
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun 13 21:26 Pictures
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun  2 18:24 Public
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun  2 18:24 Templates
drwxr-xr-x 2 kunjuzz kunjuzz 4096 Jun  2 18:24 Videos
kunjuzz@kunjuzz-VirtualBox:~$
```

- **ls -R** : It will display the content of the sub-directories also.

```
kunjuzz@kunjuzz-VirtualBox:~$ ls -R
.:
Desktop Documents Downloads Music Pictures Public Templates Videos

./Desktop:
./Documents:
./Downloads:
./Music:
./Pictures:
'Screenshot from 2021-06-13 21-18-15.png'
'Screenshot from 2021-06-13 21-18-25.png'

./Public:
./Templates:
./Videos:
```

- **ls -a** : hidden files start with . (dot) symbol and they are not visible in the regular directory. The command will enlist the whole list of the current directory including the hidden files.

```
kunjuzz@kunjuzz-VirtualBox:~$ ls -a
.          .bash_logout  .config  Downloads  Music  Public  Videos
..         .bashrc       Desktop  .gnupg     Pictures .ssh
.bash_history .cache       Documents .local     .profile Templates
```

- **ls -lh** : This command will show you the file sizes in human readable format. Size of the file is very difficult to read when displayed in terms of byte.

```
kunjuzz@kunjuzz-VirtualBox:~$ ls -lh
total 32K
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun  2 18:24 Desktop
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun  2 18:24 Documents
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun  2 18:24 Downloads
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun  2 18:24 Music
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun 13 21:38 Pictures
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun  2 18:24 Public
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun  2 18:24 Templates
drwxr-xr-x 2 kunjuzz kunjuzz 4.0K Jun  2 18:24 Videos
kunjuzz@kunjuzz-VirtualBox:~$ ls -li
25101 Desktop    25102 Downloads  25107 Pictures  25103 Templates
25105 Documents  25106 Music     25104 Public    25108 Videos
kunjuzz@kunjuzz-VirtualBox:~$
```

- **ls -l** : It will show one file as per line

```
kunjuzz@kunjuzz-VirtualBox:~$ ls -l
Desktop
Documents
Downloads
Music
Pictures
Public
Templates
Videos
```

- **ls -t** : It sorts the file by modification time, showing the last edited file first.

```
kunjuzz@kunjuzz-VirtualBox:~$ ls -t
Pictures Desktop Documents Downloads Music Public Templates Videos
```

5) **cd** : used to change the current working directory.

```
kunjuzz@kunjuzz-VirtualBox:~$ cd Documents
kunjuzz@kunjuzz-VirtualBox:~/Documents$ pwd
/home/kunjuzz/Documents
```

- **cd ~** : To change the directory to home directory from the current working directory.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cd ~
kunjuzz@kunjuzz-VirtualBox:~$ cd Music/
```

- **cd ..** : To change the directory to parent directory of the current working directory.

```
kunjuzz@kunjuzz-VirtualBox:~/Music$ cd ..
kunjuzz@kunjuzz-VirtualBox:~$ cd Documents
```

6) **mkdir** : create a new directory wherever you want in your system.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ mkdir files
kunjuzz@kunjuzz-VirtualBox:~/Documents$ ls
files
```

- **mkdir <dirname> /<dirname>** : create a new directory inside the directory.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ mkdir files/file1
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cd files
kunjuzz@kunjuzz-VirtualBox:~/Documents/files$ ls
file1
```

7) **rmdir** : This command is used to delete a directory. But will not be able to delete a directory including a sub-directory. It means, a directory has to be empty to be deleted.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents/files$ rmdir file1
kunjuzz@kunjuzz-VirtualBox:~/Documents/files$ ls
kunjuzz@kunjuzz-VirtualBox:~/Documents/files$ cd ..
kunjuzz@kunjuzz-VirtualBox:~/Documents$ ls
files
```

8) **touch** : To create empty files. We can update the modification and access time of each file with the help of touch command.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ touch file1.txt
```

- **touch <filename1> <filename2> ....** : To create multiple files just type all the file names with a single touch command followed by enter key.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ touch file3.txt file4.txt
kunjuzz@kunjuzz-VirtualBox:~/Documents$ ls
file1.txt file2.txt file3.txt file4.txt files
```

9) **rm** : This command is used to remove a file. The command line doesn't have a recycle bin or trash unlike other GUI's to recover the files.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ rm file1.txt
kunjuzz@kunjuzz-VirtualBox:~/Documents$ ls
file2.txt file3.txt file4.txt files
kunjuzz@kunjuzz-VirtualBox:~/Documents$
```

10) **cat** : It can be used to display the content of a file, copy content from one file to another, concatenate the contents of multiple files, display the line number, display \$ at the end of the line, etc.

- **cat > filename** : To create a file.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cat > file2.txt
Hello World
I am Anjali C Abraham
^C
```

- **cat <filename>** : used to display the content of a file.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cat file2.txt
Hello World
I am Anjali C Abraham
```

- **cat [file1 file2 and so on] > [new file name]** : To concatenate contents of multiple files into one.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cat file2.txt file3.txt > file4.txt
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cat file4.txt
Hello World
I am Anjali C Abraham
I am 23 years old
I study at Amal Jyothi College Of Engineering
```

- **cat [filename1] [filename2] ...** : used to concatenate the contents of multiple files in a single new file.

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cat file2.txt file3.txt
Hello World
I am Anjali C Abraham
I am 23 years old
I study at Amal Jyothi College Of Engineering
```

- **To convert the contents of file into uppercase or lowercase**

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cat file2.txt|tr a-z A-Z
HELLO WORLD
I AM ANJALI C ABRAHAM
```

```
kunjuzz@kunjuzz-VirtualBox:~/Documents$ cat file2.txt|tr A-Z a-z
hello world
i am anjali c abraham
```