

# ADVANCED COMPUTER NETWORK ASSIGNMENT

**Submitted By:**

Ancy Alexander

Roll No: 16

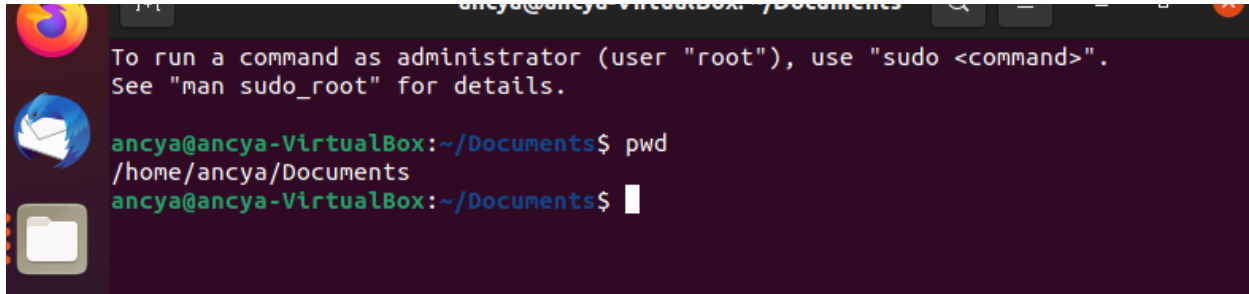
MCA Batch A

**Submitted To:**

Rini Kurian

## 1)pwd

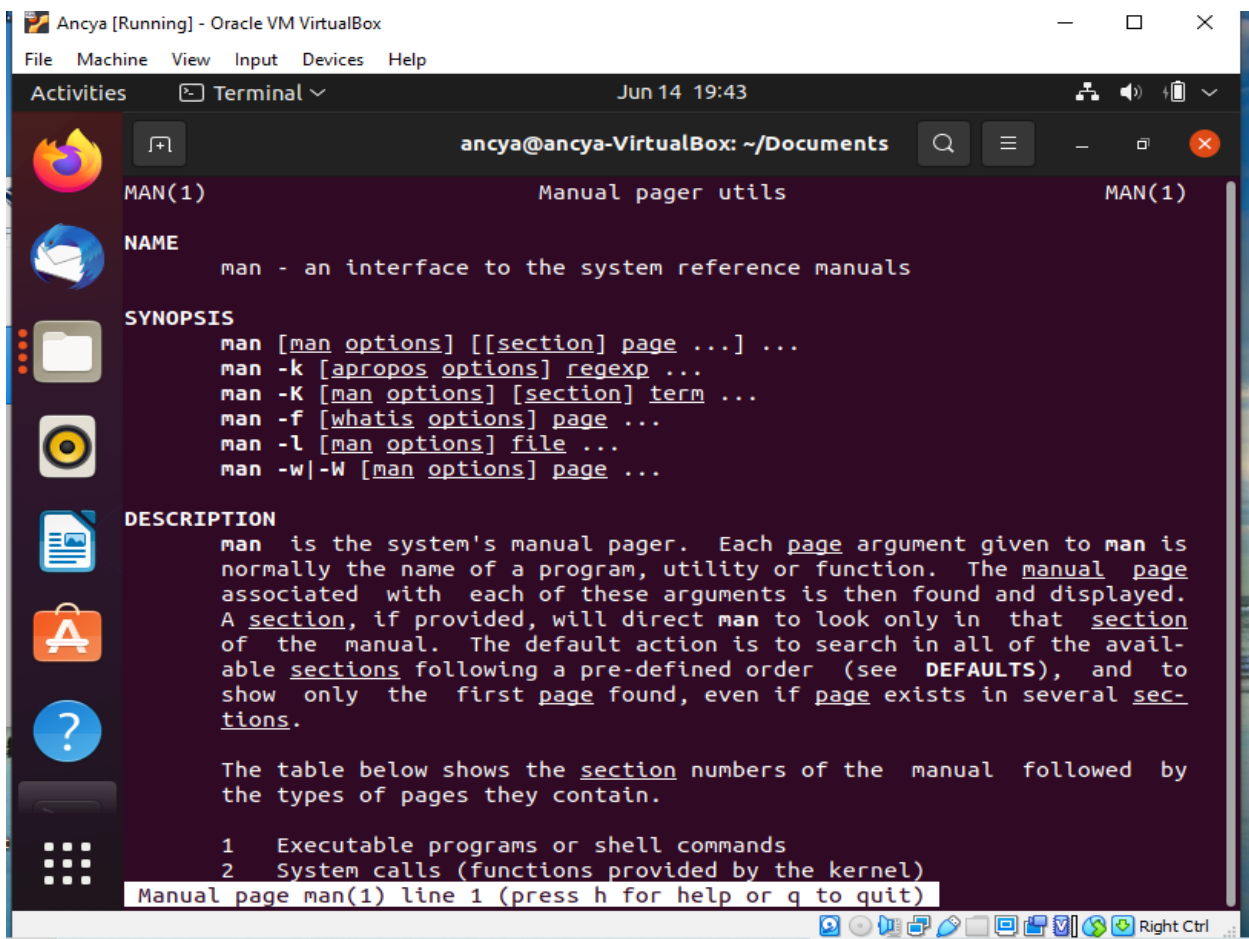
pwd command to find out the path of the current working directory (folder) you're in

A terminal window from an Oracle VM VirtualBox. The prompt is 'ancya@ancya-VirtualBox: ~/Documents'. The user has entered 'pwd' and the output is '/home/ancya/Documents'.

```
ancya@ancya-VirtualBox: ~/Documents$ pwd
/home/ancya/Documents
ancya@ancya-VirtualBox: ~/Documents$
```

## 2)man

It can easily learn how to use them right from Linux's shell by using the man command.

A terminal window showing the output of the 'man' command. The title bar says 'Ancy [Running] - Oracle VM VirtualBox'. The terminal title is 'ancya@ancya-VirtualBox: ~/Documents'. The output shows the manual page for 'man(1)', titled 'Manual pager utils'. It includes sections for NAME, SYNOPSIS, and DESCRIPTION. The SYNOPSIS section lists various options like -k, -K, -f, -l, and -w/-W. The DESCRIPTION section explains that 'man' is the system's manual pager and lists the section numbers for executable programs (1) and system calls (2).

```
MAN(1)                                Manual pager utils                                MAN(1)

NAME
  man - an interface to the system reference manuals

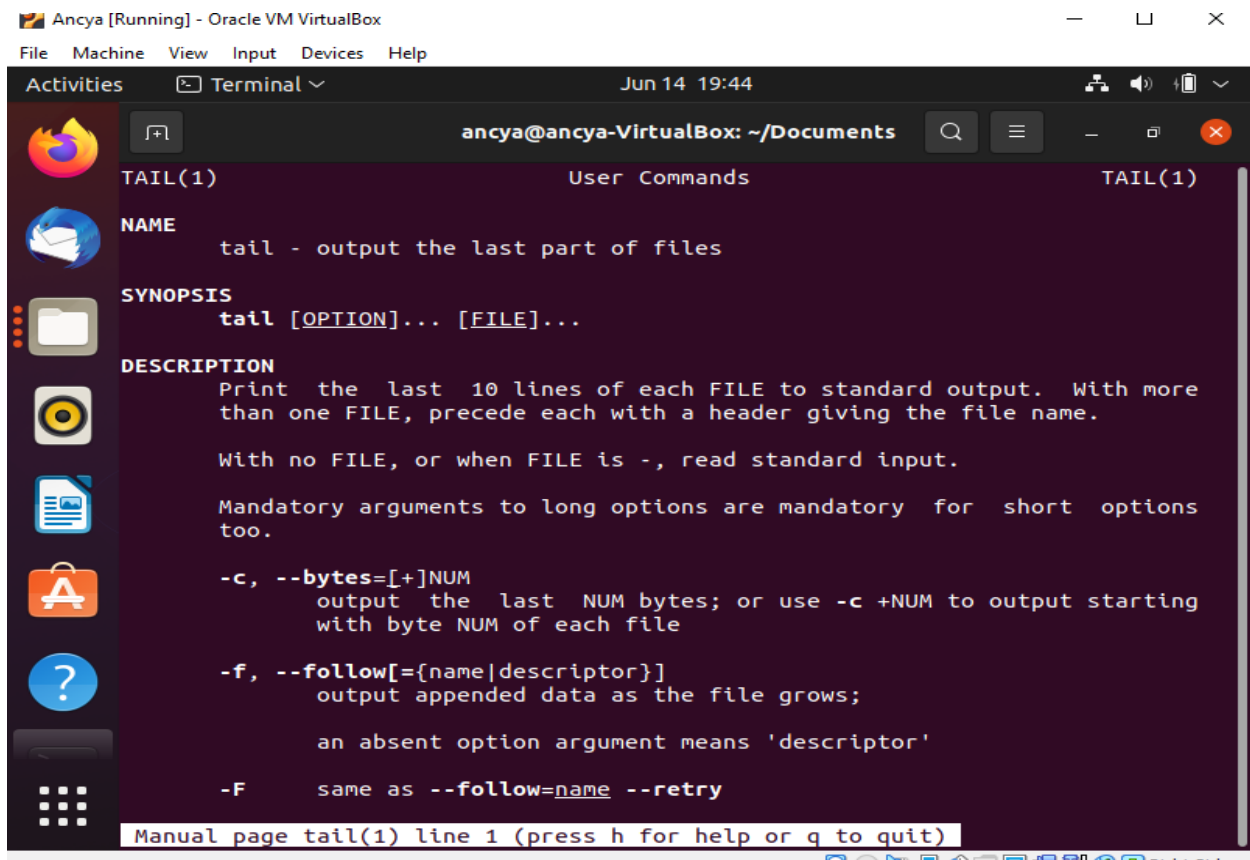
SYNOPSIS
  man [man options] [[section] page ...] ...
  man -k [apropos options] regexp ...
  man -K [man options] [section] term ...
  man -f [whatis options] page ...
  man -l [man options] file ...
  man -w|-W [man options] page ...

DESCRIPTION
  man is the system's manual pager. Each page argument given to man is
  normally the name of a program, utility or function. The manual page
  associated with each of these arguments is then found and displayed.
  A section, if provided, will direct man to look only in that section
  of the manual. The default action is to search in all of the avail-
  able sections following a pre-defined order (see DEFAULTS), and to
  show only the first page found, even if page exists in several sec-
  tions.

  The table below shows the section numbers of the manual followed by
  the types of pages they contain.

  1  Executable programs or shell commands
  2  System calls (functions provided by the kernel)

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



Ancya [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Terminal Jun 14 19:44

ancya@ancya-VirtualBox: ~/Documents

TAIL(1) User Commands TAIL(1)

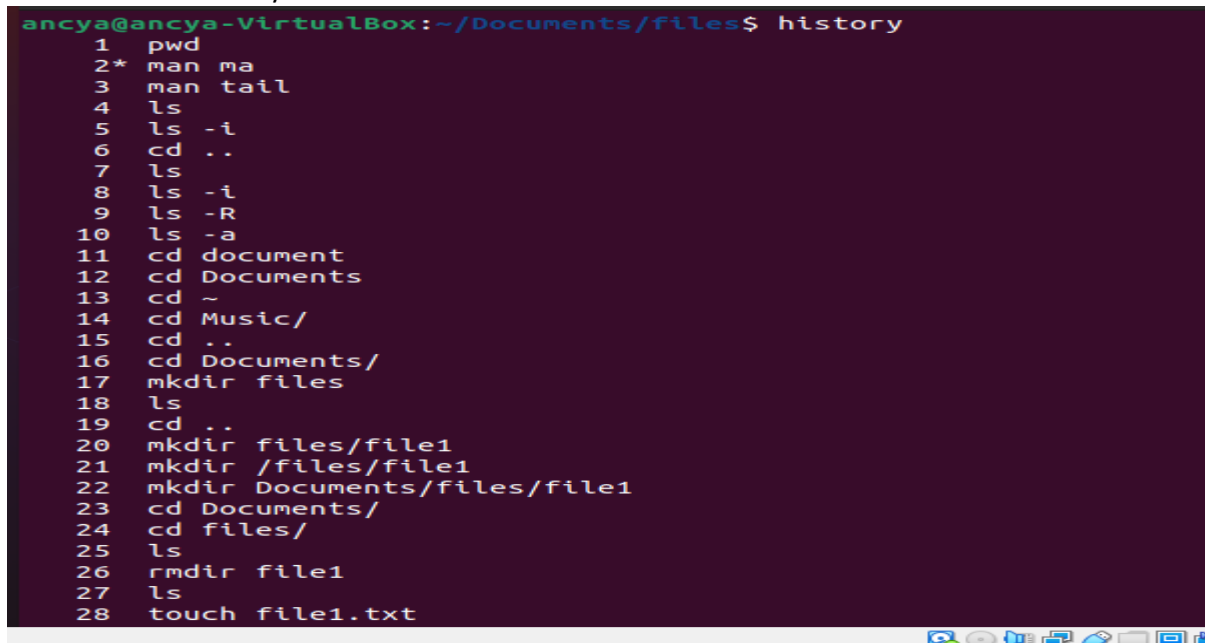
**NAME**  
tail - output the last part of files

**SYNOPSIS**  
tail [OPTION]... [FILE]...

**DESCRIPTION**  
Print the last 10 lines of each FILE to standard output. With more than one FILE, precede each with a header giving the file name.  
  
With no FILE, or when FILE is -, read standard input.  
  
Mandatory arguments to long options are mandatory for short options too.  
  
-c, --bytes=[+]NUM  
output the last NUM bytes; or use -c +NUM to output starting with byte NUM of each file  
  
-f, --follow[={name|descriptor}]  
output appended data as the file grows;  
  
an absent option argument means 'descriptor'  
  
-F same as --follow=name --retry

Manual page tail(1) line 1 (press h for help or q to quit)

3) history • When you have been using Linux for a certain period of time, you will quickly notice that you can run hundreds of commands every day. As such, running history command is particularly useful if you want to review the commands you have entered before. • #history • !command number to run a command from history



ancya@ancya-VirtualBox: ~/Documents/files\$ history

```
1  pwd
2* man ma
3  man tail
4  ls
5  ls -i
6  cd ..
7  ls
8  ls -i
9  ls -R
10 ls -a
11 cd document
12 cd Documents
13 cd ~
14 cd Music/
15 cd ..
16 cd Documents/
17 mkdir files
18 ls
19 cd ..
20 mkdir files/file1
21 mkdir /files/file1
22 mkdir Documents/files/file1
23 cd Documents/
24 cd files/
25 ls
26 rmdir file1
27 ls
28 touch file1.txt
```

## 4) cd

To navigate through the Linux files and directories, use the cd .

- 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

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

## 5) Mkdir

Use mkdir command to make a new directory — if you type mkdir Music it will create a directory called Music. • To generate a new directory inside another directory, use this Linux basic command mkdir Music/Newfile • use the p (parents) option to create a directory in between two existing directories. For example, mkdir -p Music/2020/Newfile will create the new “2020” file.

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

## 6) . rmdir

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

```
ancya@ancya-VirtualBox:~/Documents/files$ rmdir file1
ancya@ancya-VirtualBox:~/Documents/files$ ls
ancya@ancya-VirtualBox:~/Documents/files$
```

## 7) touch

The touch command allows you to create a blank new file through the Linux command line. • As an example, enter touch /home/username/Documents/Web.html to create an HTML file entitled Web under the Documents directory

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

## 8) rm

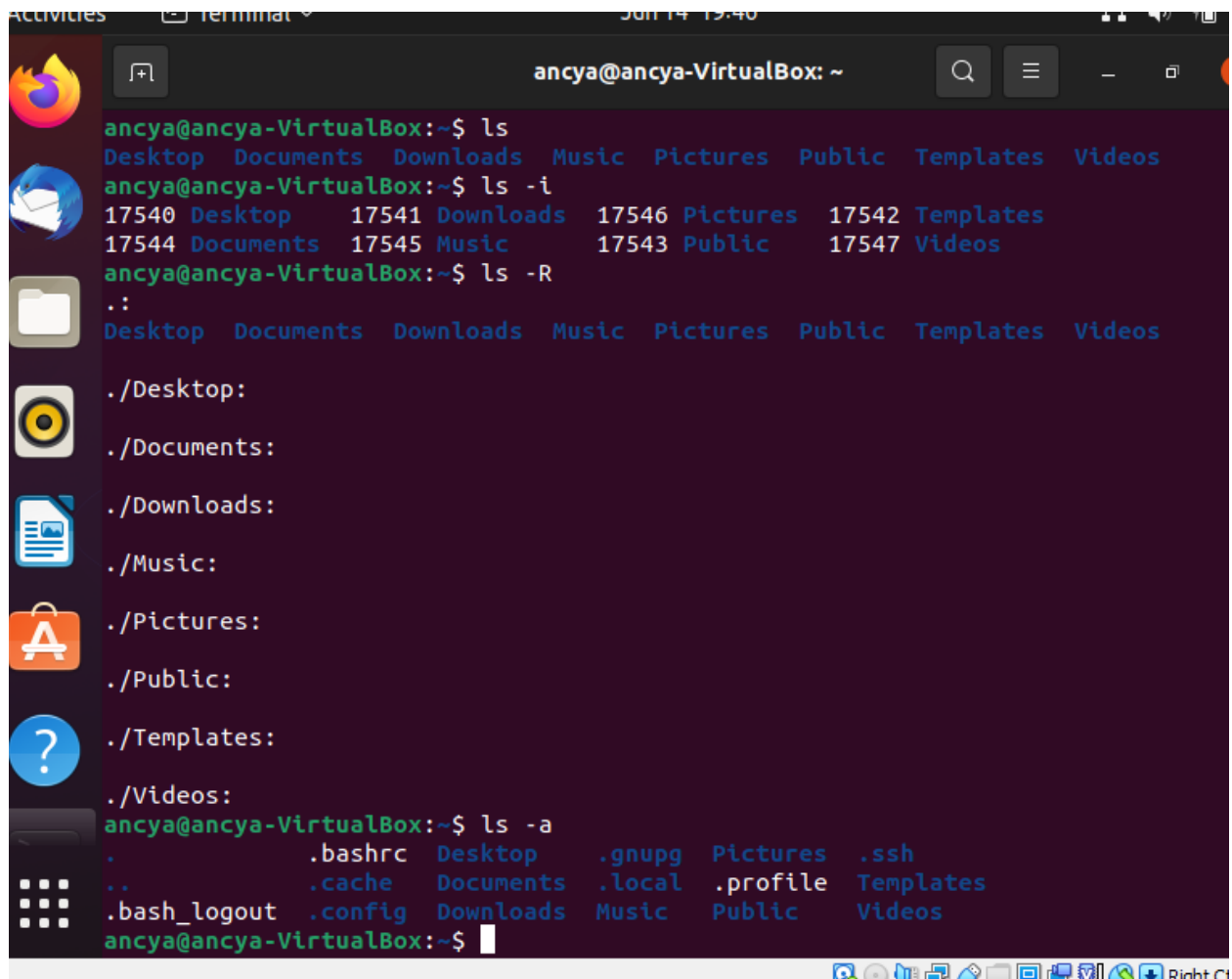
The rm command is used to delete directories and the contents within them. If you only want to delete the directory — as an alternative to rmdir — use rm -r. • Note: Be very careful with this command and double-check which directory you are in. This will delete everything and there is no undo. • To remove a file use rm filename

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

## 9. 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.

- If you want to see the content of other directories, type ls and then the directory's path. For example, enter ls /home/username/Documents to view the content of Documents.
- There are variations you can use with the ls command:
  - 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.

A screenshot of a Linux terminal window titled 'ancya@ancya-VirtualBox: ~'. The terminal shows the following commands and output:  
1. `ls`: Lists the contents of the home directory: Desktop, Documents, Downloads, Music, Pictures, Public, Templates, Videos.  
2. `ls -l`: Lists the contents with permissions and owner. Output:  
17540 Desktop 17541 Downloads 17546 Pictures 17542 Templates  
17544 Documents 17545 Music 17543 Public 17547 Videos  
3. `ls -R`: Recursively lists the contents of the home directory.  
4. `ls -a`: Lists all files, including hidden ones. Output:  
. .bashrc Desktop .gnupg Pictures .ssh  
.. .cache Documents .local .profile Templates  
.bash\_logout .config Downloads Music Public Videos  
The terminal window has a dark background and a sidebar on the left with various application icons. The top bar shows the system clock as 15:40 on Jun 14.

## 10)cat

- cat (short for concatenate) is one of the most frequently used commands in Linux. It is used to list the contents of a file on the standard output stdout.
- To run this command, type cat followed by the file's name and its extension. For instance: cat file.txt.
- Here are other ways to use the cat command:
  - cat > filename creates a new file
  - cat filename1 filename2>filename3 joins two files (1 and 2) and stores the output of them in a new file (3)
  - to convert a file to upper or lower case use, cat filename | tr a-z A-Z >output.txt • cat >>myfile insert data to a file

```
ancya@ancya-VirtualBox:~/Documents/files$ cat > file1.txt
Amal jyothi
Ancy
ancya@ancya-VirtualBox:~/Documents/files$ cat > file2.txt
Alexander
ancya@ancya-VirtualBox:~/Documents/files$ cat file1.txt file2.txt
Amal jyothi
Ancy
Alexander
ancya@ancya-VirtualBox:~/Documents/files$ cat file1.txt,file2.txt>file3.txt
cat: file1.txt,file2.txt: No such file or directory
ancya@ancya-VirtualBox:~/Documents/files$ cat file3.txt
ancya@ancya-VirtualBox:~/Documents/files$ cat file1.txt file2.txt>file3.txt
ancya@ancya-VirtualBox:~/Documents/files$ cat file3.txt
Amal jyothi
Ancy
Alexander
ancya@ancya-VirtualBox:~/Documents/files$ cat file3.txt | tr a-z A-Z
AMAL JYOTHI
ANCY
ALEXANDER
ancya@ancya-VirtualBox:~/Documents/files$ cat file3.txt | tr A-Z a-z
amal jyothi
ancy
alexander
ancya@ancya-VirtualBox:~/Documents/files$
```