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1) Ans:

Almost every application available in google is on cloud . Some applications are hosted in some platforms like Heroku, Digitalocean etc. Some pages are also hosted in Github. But those applications which have higher amount of traffics needs to be on cloud to fulfill the requirements of the customers. So there are rarely any cloud computing applications that are not on google

2)Ans : Some basic linux commands are :

1) mkdir [directory name to be created]

This command creates a new directory.

```
afsan@haque-20301145:~/Documents$ mkdir newDirectory
afsan@haque-20301145:~/Documents$ ls
newDirectory
afsan@haque-20301145:~/Documents$ █
```

2) cd [directory name]

It changes the directory

```
afsan@haque-20301145:~/Documents$ cd newDirectory/
afsan@haque-20301145:~/Documents/newDirectory$ touch sample.txt
afsan@haque-20301145:~/Documents/newDirectory$ ls
sample.txt
afsan@haque-20301145:~/Documents/newDirectory$ █
```

3) vi, cat [file name]

Cat opens a file and vim opens and enables to edit

```
afsan@haque-20301145:~/Documents/newDirectory$ vi sample.txt
afsan@haque-20301145:~/Documents/newDirectory$ cat sample.txt
My name is Afsan
afsan@haque-20301145:~/Documents/newDirectory$ █
```

4) cd ..

Go to previous directory

```
afsan@haque-20301145:~/Documents/newDirectory$ cd ..
afsan@haque-20301145:~/Documents$ █
```

5) ifconfig

Shows network addresses

```

afsan@haque-20301145:~/Documents$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::7d17:afb7:391c:6557 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:70:95:15 txqueuelen 1000 (Ethernet)
    RX packets 41 bytes 5587 (5.5 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 104 bytes 11641 (11.6 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 74 bytes 7935 (7.9 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 74 bytes 7935 (7.9 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

afsan@haque-20301145:~/Documents$

```

6) ls [directory name]

Lists all the files,directories

```

afsan@haque-20301145:~/Documents$ ls
newDirectory2 newDirectory
afsan@haque-20301145:~/Documents$ rm -r newDirectory2/
afsan@haque-20301145:~/Documents$ ls
newDirectory
afsan@haque-20301145:~/Documents$

```

7) rm [file name]

Removes a file

```

afsan@haque-20301145:~/Documents$ cd newDirectory/
afsan@haque-20301145:~/Documents/newDirectory$ ls
sample.txt
afsan@haque-20301145:~/Documents/newDirectory$ rm sample.txt
afsan@haque-20301145:~/Documents/newDirectory$ ls
afsan@haque-20301145:~/Documents/newDirectory$ █

```

8) cp [copied file name] [path to put the file]

Copy the file from a source to destination

```
afsan@haque-20301145:~/Documents/newDirectory$ cd ..
afsan@haque-20301145:~/Documents$ mkdir test
afsan@haque-20301145:~/Documents$ cd test
afsan@haque-20301145:~/Documents/test$ touch sample1.txt
afsan@haque-20301145:~/Documents/test$ cd ..
afsan@haque-20301145:~/Documents$ ls
newDirectory  test
afsan@haque-20301145:~/Documents$ cp test/sample1.txt newDirectory/
afsan@haque-20301145:~/Documents$ cd newDirectory/
afsan@haque-20301145:~/Documents/newDirectory$ ls
sample1.txt
afsan@haque-20301145:~/Documents/newDirectory$
```

9) ls -la

Show all the files with accesibilities

```
afsan@haque-20301145:~/Documents/newDirectory$ ls -la
total 8
drwxrwxr-x 2 afsan afsan 4096 অক্টোবর  4 01:39 .
drwxr-xr-x 4 afsan afsan 4096 অক্টোবর  4 01:38 ..
-rw-rw-r-- 1 afsan afsan   0 অক্টোবর  4 01:39 sample1.txt
afsan@haque-20301145:~/Documents/newDirectory$
```

10) mv [from] [to]

Move or cuts the file

```
afsan@haque-20301145:~/Documents/newDirectory$ cd ..
afsan@haque-20301145:~/Documents$ ls
newDirectory  test
afsan@haque-20301145:~/Documents$ cd test
afsan@haque-20301145:~/Documents/test$ ls
sample1.txt
afsan@haque-20301145:~/Documents/test$ touch sample2.txt
afsan@haque-20301145:~/Documents/test$ cd ..
afsan@haque-20301145:~/Documents$ ls
newDirectory  test
afsan@haque-20301145:~/Documents$ mv test/sample2.txt newDirectory/
afsan@haque-20301145:~/Documents$ cd newDirectory/
afsan@haque-20301145:~/Documents/newDirectory$ ls
sample1.txt  sample2.txt
afsan@haque-20301145:~/Documents/newDirectory$
```

11) history

Check the command history

```
afsan@haque-20301145: ~/Documents/newDirector $ history
1  hostnamectl
2  hostnamectl set-hostname haque-20301145
3  cd /home/
4  ls
5  ls /home/
6  sudo userdel af
7  ls /home/
8  sudo userdel -r af
9  ls /home/
10 sudo rm -r /home/af
11 ls /home/
12 sudo cat /etc/passwd
13 sudo gedit /etc/passwd
14 python
15 python3
16 sudo apt update
17 ifconfig
18 sudo apt install net-tool
19 sudo apt install net-tools
20 sudo apt install snapd
21 sudo snap install code --classic
22 code
23 ifconfig
24 ifconfig'
25 clear
26 whoami
27 ping www.google.com
28 history
29 git
30 sudo apt install git
31 git
```

11) man [command name]

Show all the functionalities of a command

```
afsan@haque-20301145:~/Documents/newDirectory$ man find
afsan@haque-20301145:~/Documents/newDirectory$
```

```
FIND(1)                                General Commands Manual                                FIND(1)

NAME
  find - search for files in a directory hierarchy

SYNOPSIS
  find [-H] [-L] [-P] [-D debugopts] [-Olevel] [starting-point...] [expression]

DESCRIPTION
  This manual page documents the GNU version of find. GNU find searches the directory tree rooted at each given starting-point by evaluating the given expression from left to right, according to the rules of precedence (see section OPERATORS), until the outcome is known (the left hand side is false for and operations, true for or), at which point find moves on to the next file name. If no starting-point is specified, . is assumed.

  If you are using find in an environment where security is important (for example if you are using it to search directories that are writable by other users), you should read the 'Security Considerations' chapter of the findutils documentation, which is called Finding Files and comes with findutils. That document also includes a lot more detail and discussion than this manual page, so you may find it a more useful source of information.

OPTIONS
  The -H, -L and -P options control the treatment of symbolic links. Command-line arguments following these are taken to be names of files or directories to be examined, up to the first argument that begins with -, or the argument '(' or '!'. That argument and any following arguments are taken to be the expression describing what is to be searched for. If no paths are given, the current directory is used. If no expression is given, the expression -print is used (but you should probably consider using -print0 instead, anyway).

  This manual page talks about 'options' within the expression list. These options control the behaviour of find but are specified immediately after the last path name. The five 'real' options -H, -L, -P, -D and -O must appear before the first path name, if at all. A double dash -- could theoretically be used to signal that any remaining arguments are not options, but this does not really work due to the way find determines the end of the following path arguments: it does that by reading until an expression argument comes (which also starts with a -). Now, if a path argument would start with a -, then find would treat it as expression argument.

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

12) find -type file

Find file types

```
afsan@haque-20301145:~/Documents/newDirectory$ find . -type f
./sample1.txt
./sample2.txt
afsan@haque-20301145:~/Documents/newDirectory$
```


13) find -type d

Find Directory types

```
afsan@haque-20301145:~/Documents/newDirectory$ find . -type f
./sample1.txt
./sample2.txt
afsan@haque-20301145:~/Documents/newDirectory$ find . -type d
.
afsan@haque-20301145:~/Documents/newDirectory$
```

14) find -name

Find a file with a name

```
afsan@haque-20301145:~/Documents/newDirectory$ find . -name '*.txt'
./sample1.txt
./sample2.txt
afsan@haque-20301145:~/Documents/newDirectory$
```

15) su [username]

Change from user to root

```
root@haque-20301145:~# su afsan
afsan@haque-20301145:/root$
```

16) whoami

Shows username

```
afsan@haque-20301145:~/Documents/test$ whoami
afsan
afsan@haque-20301145:~/Documents/test$
```

17) sudo -i

Change to root from user

```
afsan@haque-20301145:~$ sudo -i
[sudo] password for afsan:
root@haque-20301145:~#
```

18) grep -i [pattern] [file name]

Find a pattern in a file

```
afsan@haque-20301145:~/Documents/test$ cat sample2.txt
This text is for grep command

:X
afsan@haque-20301145:~/Documents/test$ man grep
afsan@haque-20301145:~/Documents/test$ grep -i text sample2.txt
This text is for grep command
```

19) hostnamectl

Shows all the userid,names

```
afsan@haque-20301145:~/Documents/test$ hostnamectl
Static hostname: haque-20301145
    Icon name: computer-vm
    Chassis: vm
    Machine ID: e3f93922cda04e35b9dc135dab8da5a5
    Boot ID: 700e33d29b384c4b9fbad792d9dab044
Virtualization: oracle
Operating System: Ubuntu 22.04.1 LTS
    Kernel: Linux 5.15.0-47-generic
    Architecture: x86-64
Hardware Vendor: innotek GmbH
Hardware Model: VirtualBox
```