

## Basic Ubuntu Commands

1. `pwd` - This command is used to print the working directory. In the screenshot below, it shows that we are in the 'Raisa' directory located in 'home' directory.

```
raisa@tahasen-24141097:~$ pwd
/home/Raisa
raisa@tahasen-24141097:~$
```

2. `cd ..` - This command takes the user to one level up in the directory, in my case, it took me from `/home/Raisa` to `/home`.

```
raisa@tahasen-24141097:~$ pwd
/home/Raisa
raisa@tahasen-24141097:~$ cd ..
raisa@tahasen-24141097:/home$ pwd
/home
raisa@tahasen-24141097:/home$
```

3. `whoami` - This command displays the username of the current user. In my case, it is 'raisa'

```
raisa@tahasen-24141097:/home$ whoami
raisa
raisa@tahasen-24141097:/home$
```

4. `Uname` - It gives information about the operating system.

```
raisa@tahasen-24141097:/home$ uname
Linux
raisa@tahasen-24141097:/home$
```

5. `ps` - This command displays the information about the running processes in the system.

```
raisa@tahasen-24141097:/home$ ps
  PID TTY          TIME CMD
 3701 pts/0    00:00:00 bash
 5146 pts/0    00:00:00 ps
```

6. `date` - prints the current date, that is, day of the week, date, months, time and year

```
raisa@tahasen-24141097:/home$ date
Sun  9 Jun 19:58:19 +06 2024
raisa@tahasen-24141097:/home$
```

7. `df` - Gives information about disk space usage by filesystem. It shows the total space and available space.

```
raisa@tahasen-24141097:/home$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
tmpfs           200552      1500    199052   1% /run
/dev/sda3       25106692 18139904   5666104  77% /
tmpfs           1002748        0   1002748   0% /dev/shm
tmpfs            5120         4     5116   1% /run/lock
/dev/sda2       524252     6220    518032   2% /boot/efi
tmpfs           200548      116    200432   1% /run/user/1000
raisa@tahasen-24141097:/home$
```

8. `Mkdir <directory>` - Used to create a directory.

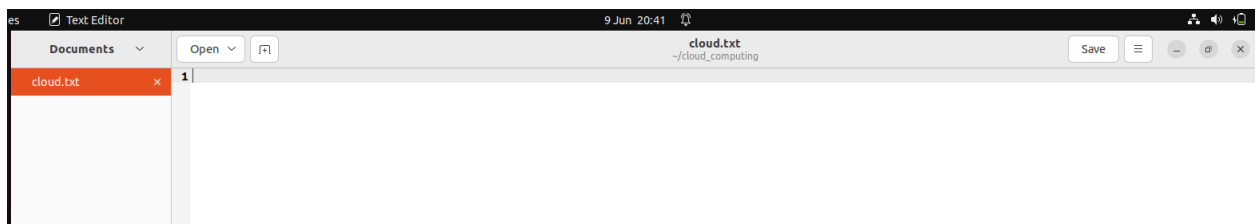
```
raisa@tahasen-24141097:~$ mkdir cloud_computing
raisa@tahasen-24141097:~$
```

9. `cd <directory>` - Used to move to the directory that is mention in the command.

```
raisa@tahasen-24141097:~$ cd cloud_computing
raisa@tahasen-24141097:~/cloud_computing$
```

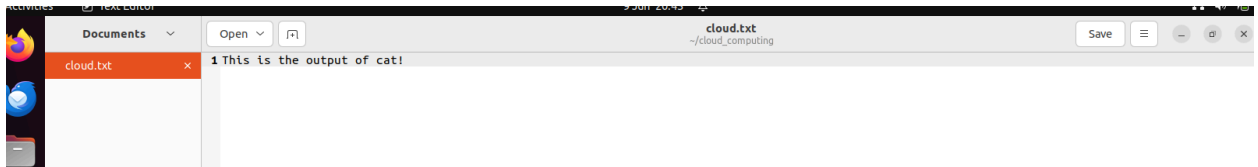
10. `gedit <filename>` - Used to create a file the working directory with the name mentioned in the command.

```
raisa@tahasen-24141097:~/cloud_computing$ gedit cloud.txt
```



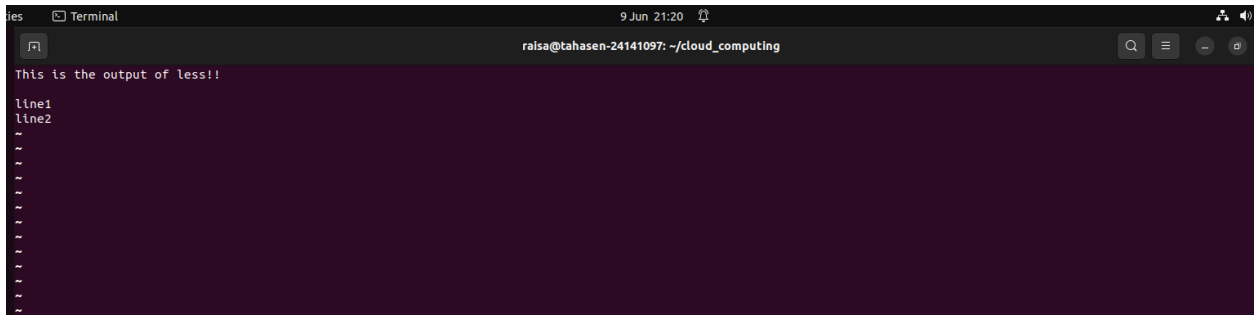
11. `cat <filename>` - Used to display the contents of the file mentioned in the command in the terminal. This command can also be used to read multiple files and create new ones.

```
raisa@tahasen-24141097:~/cloud_computing$ gedit cloud.txt
raisa@tahasen-24141097:~/cloud_computing$ cat cloud.txt
This is the output of cat!
raisa@tahasen-24141097:~/cloud_computing$
```



12. `less <filename>` - Used to read the contents of the mentioned file page by page, that is one page at a time.

```
raisa@tahasen-24141097:~/cloud_computing$ less cloud.txt
raisa@tahasen-24141097:~/cloud_computing$
```

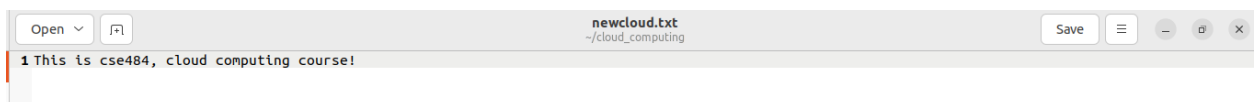


13. `mv <oldfile> <newfile>` - Used to rename a file.

```
raisa@tahasen-24141097:~/cloud_computing$ gedit cloud.txt
raisa@tahasen-24141097:~/cloud_computing$ mv cloud.txt newcloud.txt
raisa@tahasen-24141097:~/cloud_computing$ gedit newcloud.txt
raisa@tahasen-24141097:~/cloud_computing$
```

14. `head <filename>` Used to read the first lines of the mentioned file. By default it shows the first 10 lines, however this number can be manipulated '`head -n [number]` `<filename>`' where 'number' is replaced by the number of lines we want to read.

```
raisa@tahasen-24141097:~/cloud_computing$ gedit newcloud.txt
raisa@tahasen-24141097:~/cloud_computing$ head newcloud.txt
This is cse484, cloud computing course!
raisa@tahasen-24141097:~/cloud_computing$
```



15. `ls` - This command lists all the directories and files under the current directory.

```
raisa@tahasen-24141097:~$ ls
24141097_4.txt    Documents    oddeven      pro          RaisaTahasen1 task2_c.c
a3t2.c           Downloads    output.txt   process      RaisaTahasen2 task2_d.c
a4chat.c         ex1          p            process1     Raisatahasen3 task2_e.c
chat2.c          ex2          p1           process2     RaisaTahasen3 tasnia.c
chat.c           input.txt    p2           process3     snap          Templates
course.txt       ishia4.c     Pictures     process4     sort          test
'CSE484 Assignemt1' ishit2.c     pp           process5     task2_a.c     test1
Desktop          Music        pp.c         Public       task2_b.c     Videos
raisa@tahasen-24141097:~$
```

16. `sudo apt-get update` - Finds the latest versions of the packages and dependencies and lets the system know if newer versions are available. However it does not download the updates.

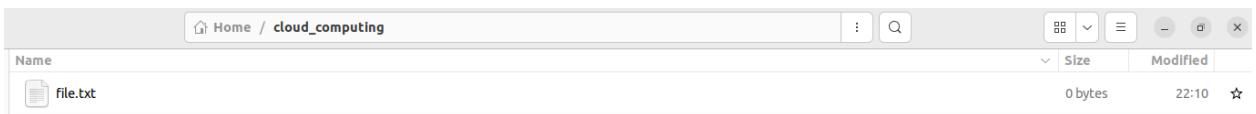
```
raisa@tahasen-24141097: ~/cloud_computing$ sudo apt-get update
[sudo] password for raisa:
Hit:1 http://us.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:5 http://us.archive.ubuntu.com/ubuntu jammy-updates/main i386 Packages [638 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,712 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1,497 kB]
Get:8 http://us.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [316 kB]
Get:9 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [103 kB]
Get:10 http://us.archive.ubuntu.com/ubuntu jammy-updates/main DEP-11 48x48 Icons [37.5 kB]
Get:11 http://us.archive.ubuntu.com/ubuntu jammy-updates/main DEP-11 64x64 Icons [56.8 kB]
Get:12 http://us.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [1,966 kB]
Get:13 http://us.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [335 kB]
Get:14 http://us.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 DEP-11 Metadata [212 B]
Get:15 http://us.archive.ubuntu.com/ubuntu jammy-updates/restricted DEP-11 48x48 Icons [29 B]
Get:16 http://us.archive.ubuntu.com/ubuntu jammy-updates/restricted DEP-11 64x64 Icons [29 B]
Get:17 http://us.archive.ubuntu.com/ubuntu jammy-updates/restricted DEP-11 64x6402 Icons [29 B]
```

17. `free` - This commands display the memory information of the operating system.

```
raisa@tahasen-24141097: ~/cloud_computing$ free
              total        used        free      shared  buff/cache   available
Mem:           2005496      1097028       172020         22172       736448       726580
Swap:          2744316       225444      2518872
```

18. `touch` - Used to create new empty file and modify timestamps of existing ones.

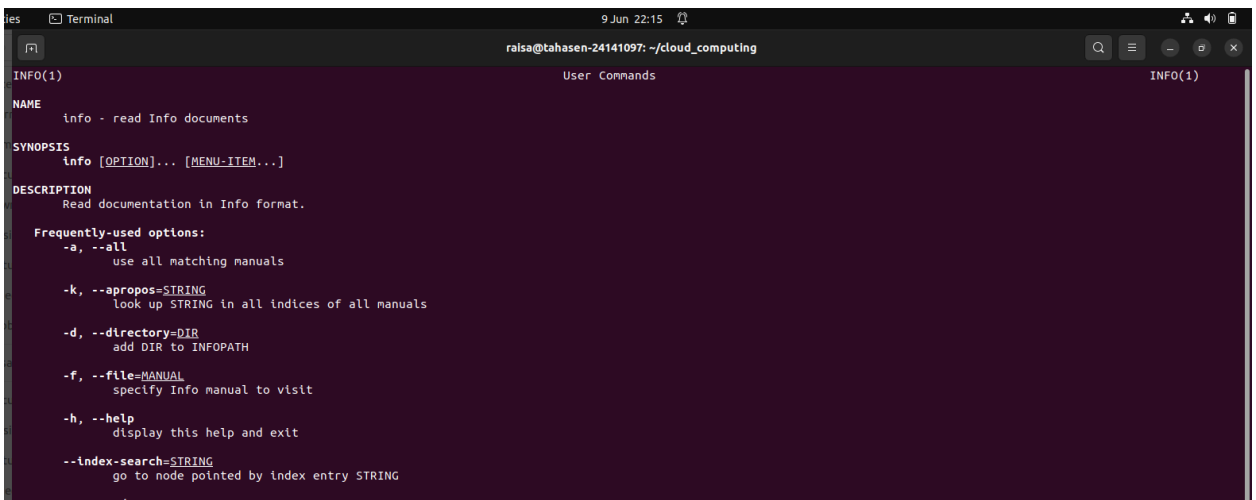
```
raisa@tahasen-24141097: ~/cloud_computing$ touch file.txt
raisa@tahasen-24141097: ~/cloud_computing$
```



Name	Size	Modified
file.txt	0 bytes	22:10

19. `man info` - Display the user manual of the command we can run in terminal.

```
raisa@tahasen-24141097: ~/cloud_computing$ man info
raisa@tahasen-24141097: ~/cloud_computing$
```



```
INFO(1)                                User Commands                                INFO(1)

NAME
  info - read Info documents

SYNOPSIS
  info [OPTION]... [MENU-ITEM...]

DESCRIPTION
  Read documentation in Info format.

Frequently-used options:
  -a, --all
      use all matching manuals

  -k, --apropos=STRING
      look up STRING in all indices of all manuals

  -d, --directory=DIR
      add DIR to INFOPATH

  -f, --file=MANUAL
      specify Info manual to visit

  -h, --help
      display this help and exit

  --index-search=STRING
      go to node pointed by index entry STRING

  -R, --node=NODENAME
```

20. `ls -l` - Shows file informations like file permissions and last modified date.

```
raisa@tahasen-24141097:~/cloud_computing$ ls -l
total 4
-rw-r--r-- 1 raisa raisa_tahasen  0 Jun  9 22:10 file.txt
-rw-r--r-- 1 raisa raisa_tahasen 40 Jun  9 21:34 newcloud.txt
raisa@tahasen-24141097:~/cloud_computing$
```

21. `chmod - 'chmod 777 file.txt'` gives read,write and execution permission of the file 'file.txt' to owner, group and other users.

```
raisa@tahasen-24141097:~/cloud_computing$ chmod 777 file.txt
raisa@tahasen-24141097:~/cloud_computing$ ls -l
total 4
-rwxrwxrwx 1 raisa raisa_tahasen  0 Jun  9 22:10 file.txt
-rw-r--r-- 1 raisa raisa_tahasen 40 Jun  9 21:34 newcloud.txt
raisa@tahasen-24141097:~/cloud_computing$
```