

# Basic Linux Commands

Submitted By

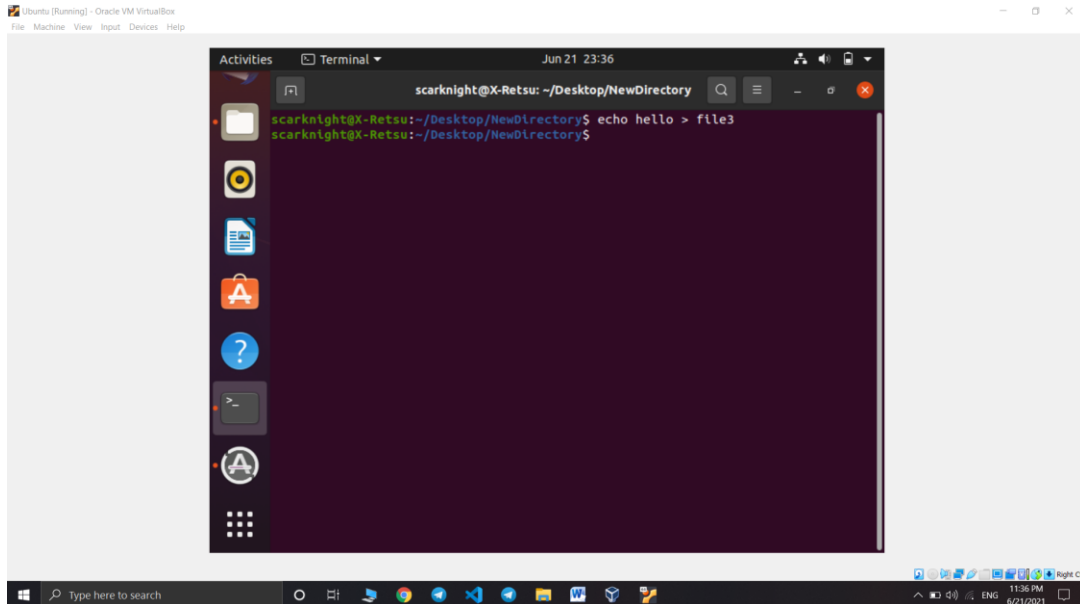
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Roll no.1

MCA – A[S2]

# Basic Linux Commands

## 1. echo

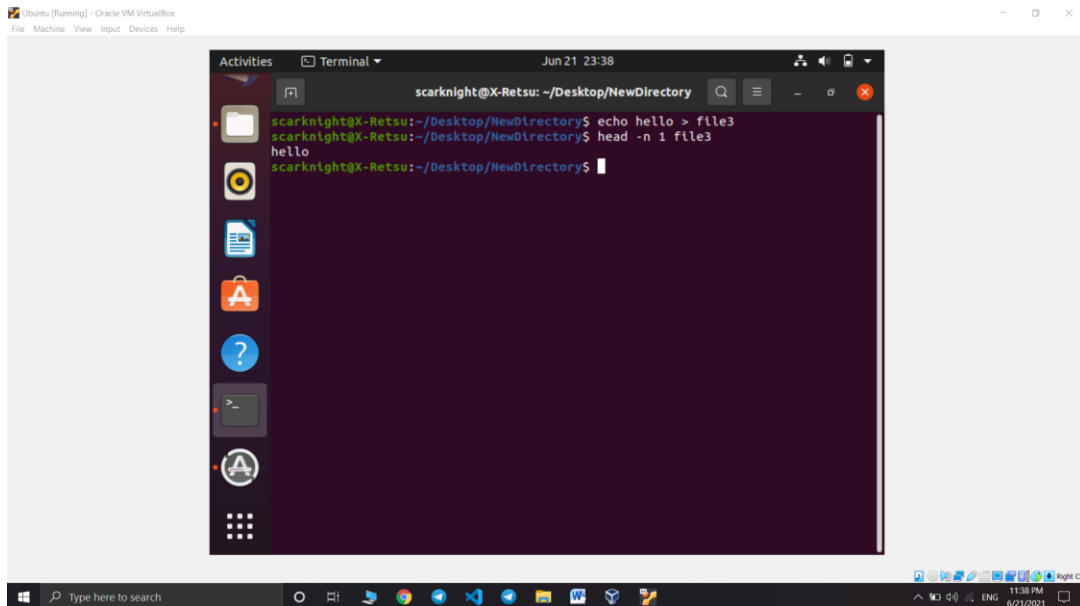


The screenshot shows a terminal window titled "scarknight@X-Retsu: ~/Desktop/NewDirectory". The user has entered the command `echo hello > file3` and pressed enter. The prompt is now `scarknight@X-Retsu:~/Desktop/NewDirectory$`. The terminal is part of a desktop environment with a sidebar on the left and a taskbar at the bottom.

```
scarknight@X-Retsu: ~/Desktop/NewDirectory
scarknight@X-Retsu:~/Desktop/NewDirectory$ echo hello > file3
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

The echo command is used to move some data into a file.

## 2. head

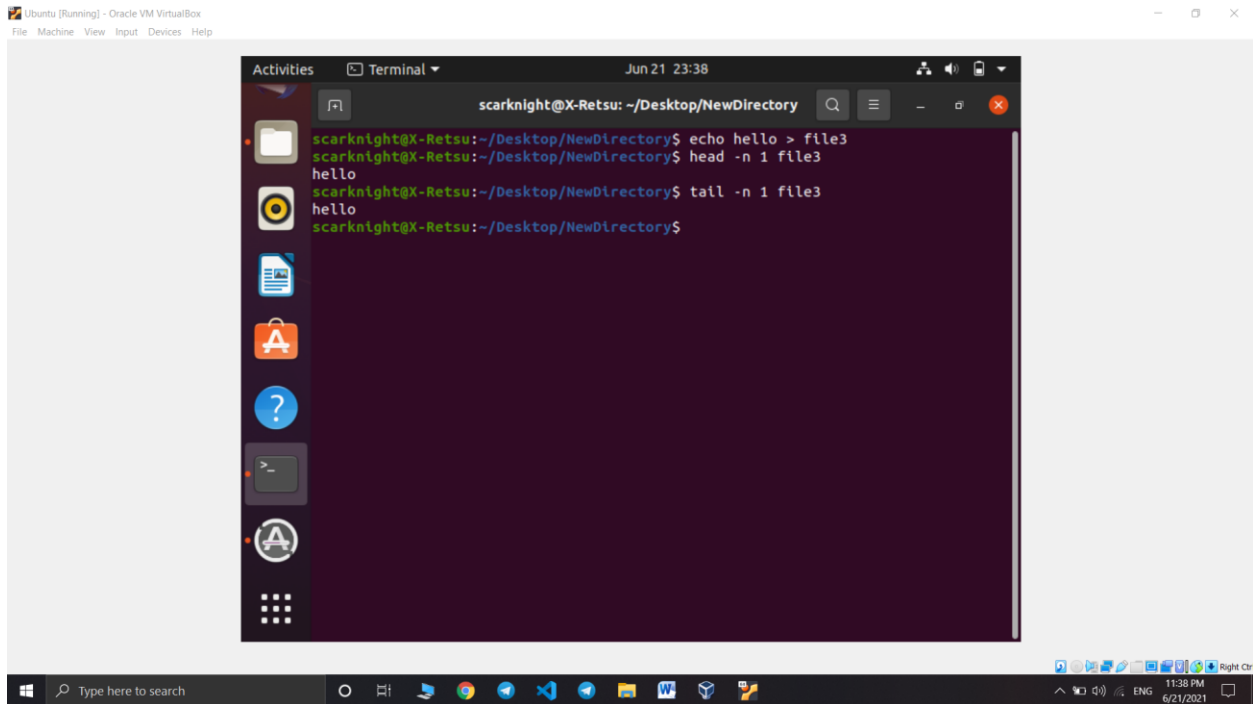


The screenshot shows the same terminal window as before, but now the user has entered the command `head -n 1 file3` and pressed enter. The output of the command, `hello`, is displayed on the line below the command. The prompt is now `scarknight@X-Retsu:~/Desktop/NewDirectory$`.

```
scarknight@X-Retsu: ~/Desktop/NewDirectory
scarknight@X-Retsu:~/Desktop/NewDirectory$ echo hello > file3
scarknight@X-Retsu:~/Desktop/NewDirectory$ head -n 1 file3
hello
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

The head command is used to view the first lines of any text file. By default, it will show the first ten lines, but you can change this number to your liking.

### 3. tail



The screenshot shows a terminal window titled "scarknight@X-Retsu: ~/Desktop/NewDirectory" with a search bar and window controls. The terminal output is as follows:

```
scarknight@X-Retsu:~/Desktop/NewDirectory$ echo hello > file3
scarknight@X-Retsu:~/Desktop/NewDirectory$ head -n 1 file3
hello
scarknight@X-Retsu:~/Desktop/NewDirectory$ tail -n 1 file3
hello
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

The terminal is running on an Ubuntu VM in Oracle VM VirtualBox. The desktop background is light gray, and the terminal window has a dark purple background. The system tray at the bottom shows the date and time as 11:38 PM on 6/21/2021.

The tail command will display the last ten lines of a text file.

### 4. read

To read the contents of a line into a variable. The read command can be used with and without arguments

Ubuntu [Running] - Oracle VM VirtualBox  
File Machine View Input Devices Help

Activities Terminal Jun 21 23:39

scarknight@X-Retsu: ~/Desktop/NewDirectory

```
scarknight@X-Retsu:~/Desktop/NewDirectory$ echo hello > file3
scarknight@X-Retsu:~/Desktop/NewDirectory$ head -n 1 file3
hello
scarknight@X-Retsu:~/Desktop/NewDirectory$ tail -n 1 file3
hello
scarknight@X-Retsu:~/Desktop/NewDirectory$ read fname;
Abhishek
scarknight@X-Retsu:~/Desktop/NewDirectory$ read sname;
Scariya
scarknight@X-Retsu:~/Desktop/NewDirectory$ echo $fname $sname;
Abhishek Scariya
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

Type here to search 11:39 PM 6/21/2021

## 5. more

Ubuntu [Running] - Oracle VM VirtualBox  
File Machine View Input Devices Help

Activities Terminal Jun 21 23:42

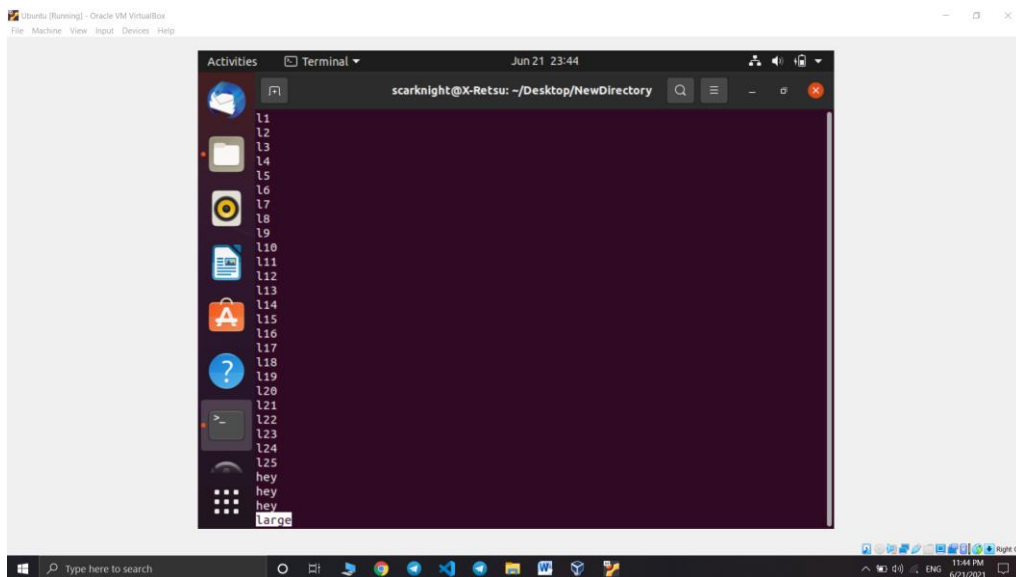
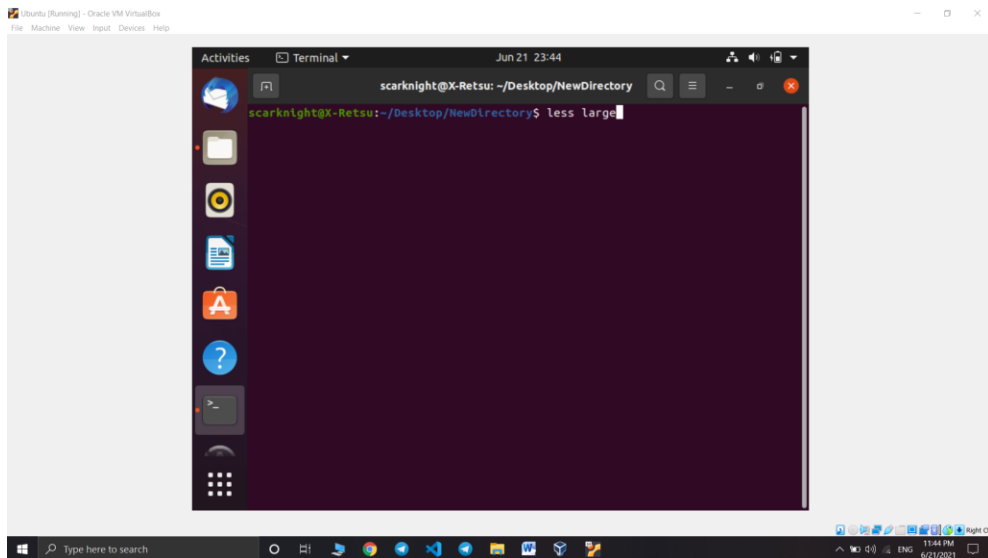
scarknight@X-Retsu: ~/Desktop/NewDirectory

```
scarknight@X-Retsu:~/Desktop/NewDirectory$ more large
l1
l2
l3
l4
l5
l6
l7
l8
l9
l10
l11
l12
l13
l14
l15
l16
l17
l18
l19
l20
l21
l22
l23
l24
l25
hey
hey
hey
```

Type here to search 11:42 PM 6/21/2021

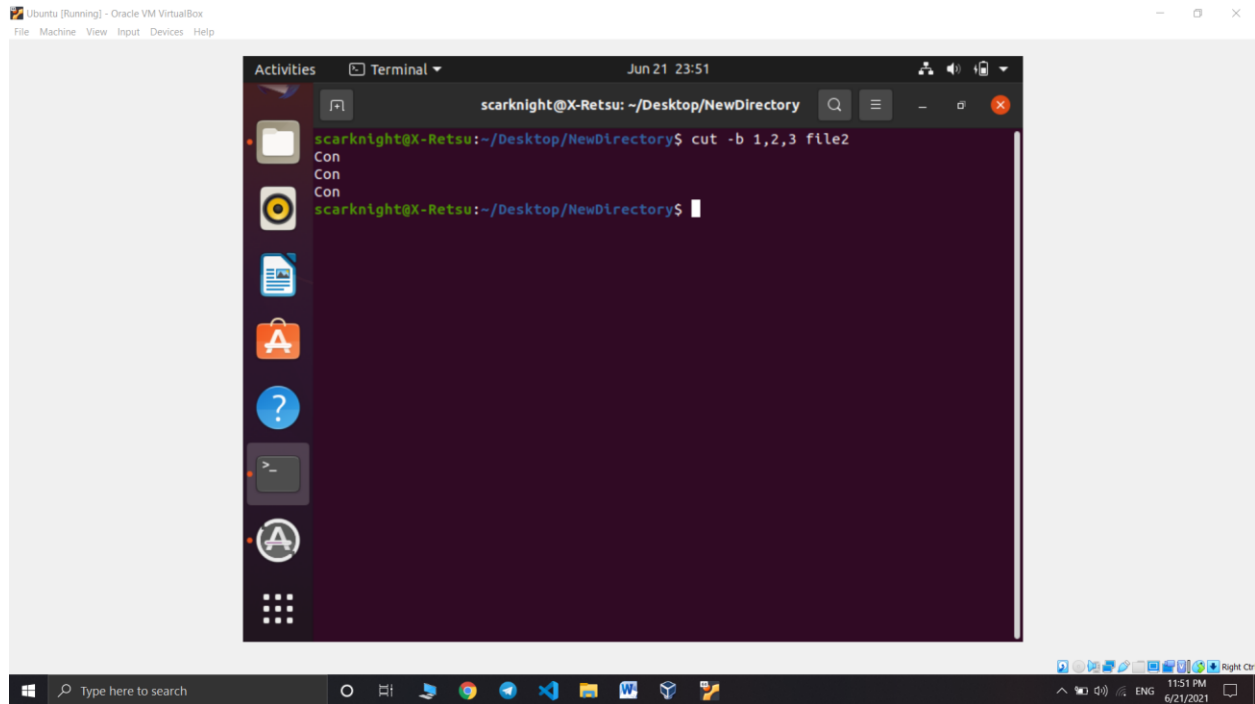
The more command is used to view the text files in the command prompt, displaying one screen at a time in case the file is large. The more command also allows the user to scroll up and down through the page.

## 6. less



Less command is a Linux utility which can be used to read contents of text file one page(one screen) per time.

## 7. cut

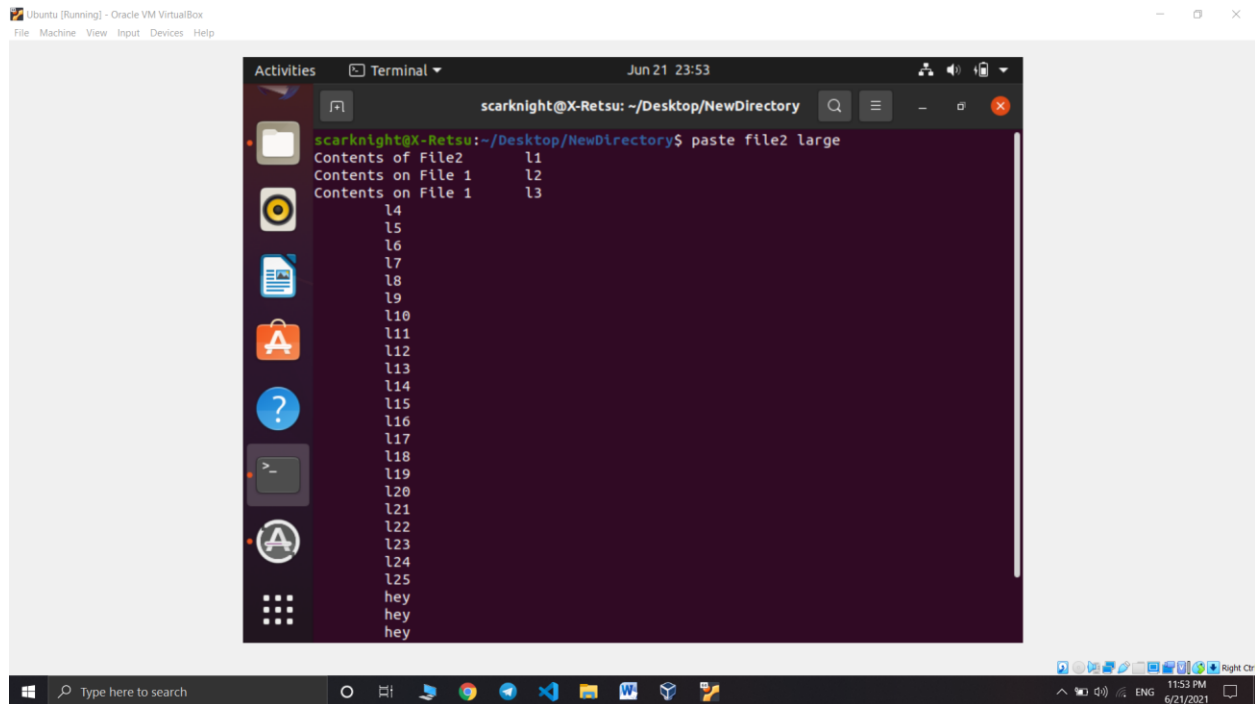


The screenshot shows a terminal window titled "scarknight@X-Retsu: ~/Desktop/NewDirectory" with the date and time "Jun 21 23:51". The terminal displays the command `cut -b 1,2,3 file2` and its output, which consists of three lines, each containing the character "C". The terminal window is running on an Ubuntu VM within Oracle VM VirtualBox. The host's taskbar is visible at the bottom, showing the Windows logo, a search bar, and various application icons. The system tray on the right indicates the time as 11:51 PM on 6/21/2021.

```
scarknight@X-Retsu: ~/Desktop/NewDirectory
scarknight@X-Retsu:~/Desktop/NewDirectory$ cut -b 1,2,3 file2
C
C
C
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

The cut command is used for cutting out the sections from each line of files and writing the result to standard output. It can be used to cut parts of a line by byte position, character and field

## 8. paste



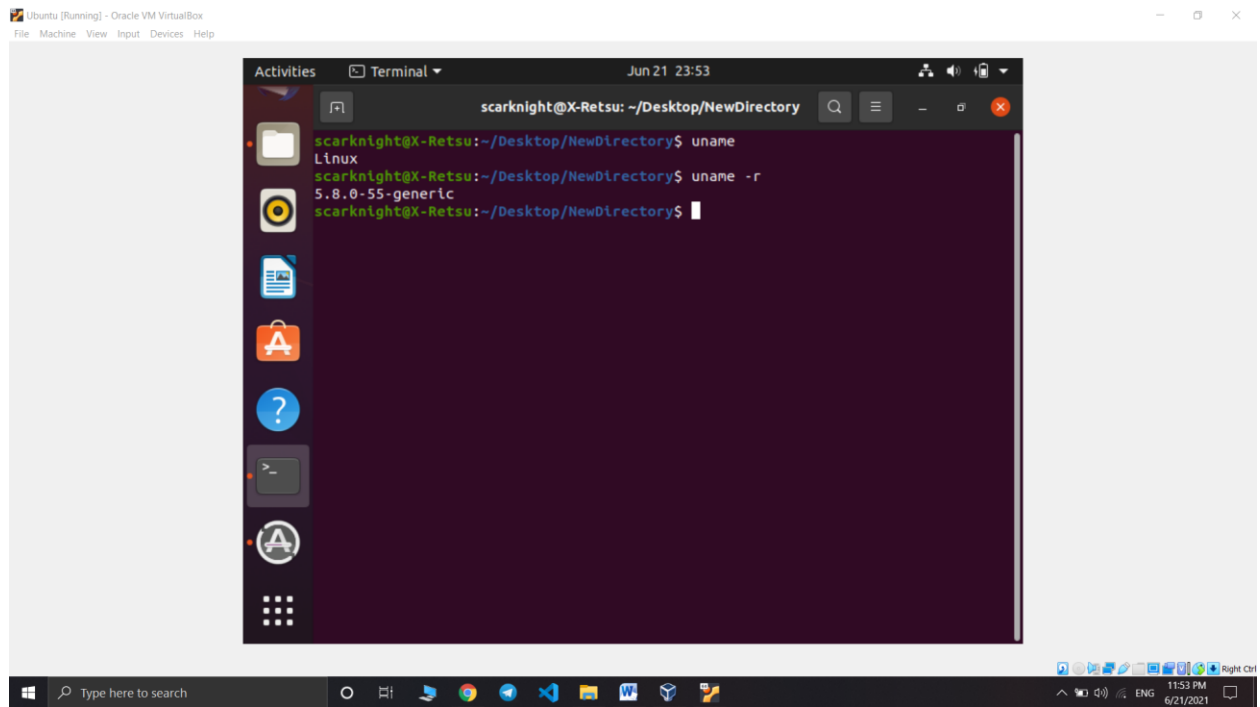
The screenshot shows a terminal window titled "scarknight@X-Retsu: ~/Desktop/NewDirectory". The command `paste file2 large` has been executed. The output is as follows:

```
Contents of File2      l1
Contents on File 1    l2
Contents on File 1    l3
l4
l5
l6
l7
l8
l9
l10
l11
l12
l13
l14
l15
l16
l17
l18
l19
l20
l21
l22
l23
l24
l25
hey
hey
hey
```

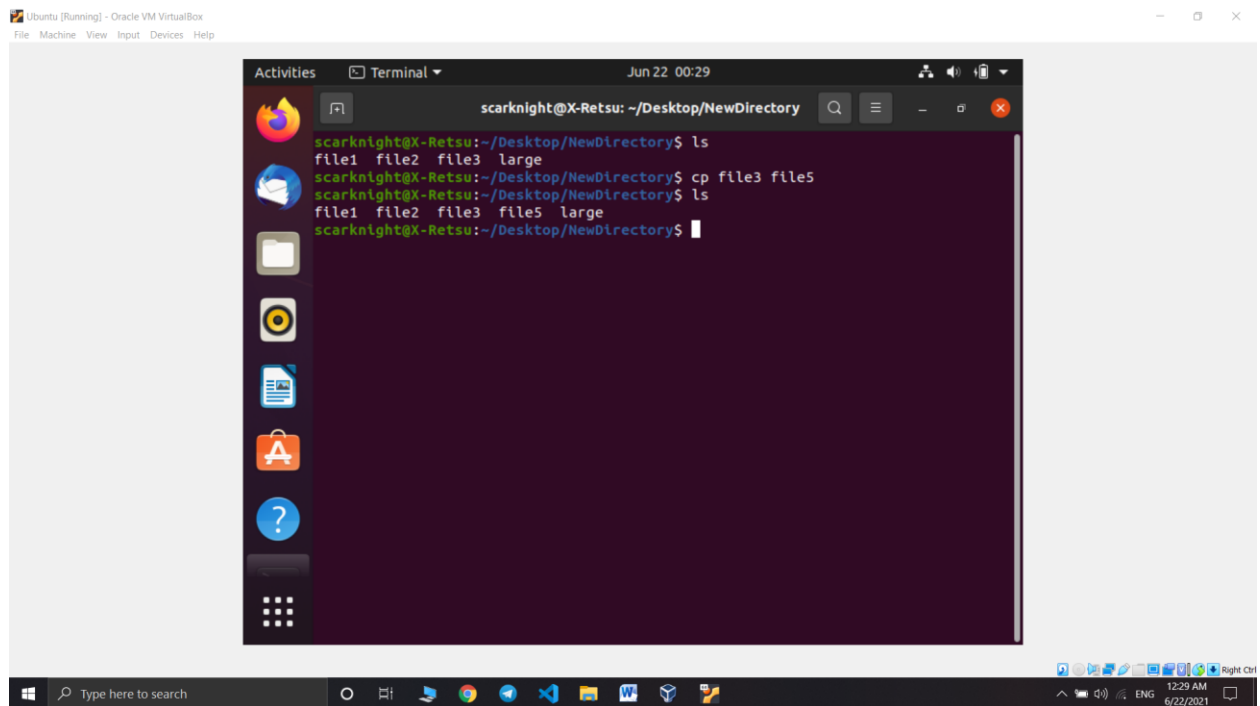
It is used to join files horizontally (parallel merging) by outputting lines consisting of lines from each file specified, separated by tab as delimiter, to the standard output.

## 9. uname

The `uname` command, short for Unix Name, will print detailed information about your Linux system like the machine name, operating system, kernel, and so on.



## 10. cp

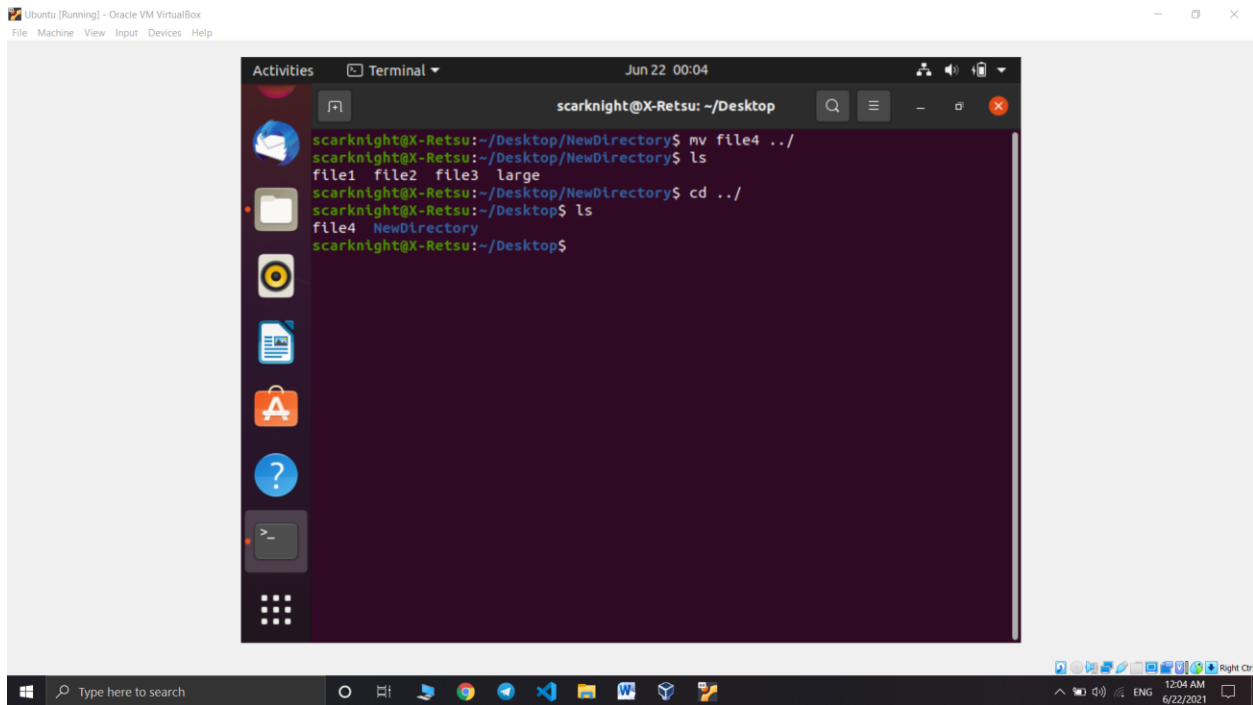




The cp command is used to copy files from the current directory to a different directory.

## 11. mv

The primary use of the mv command is to move files, it can also be used to rename files. The arguments in mv are similar to the cp command. You need to type mv, the file's name, and the destination's directory.

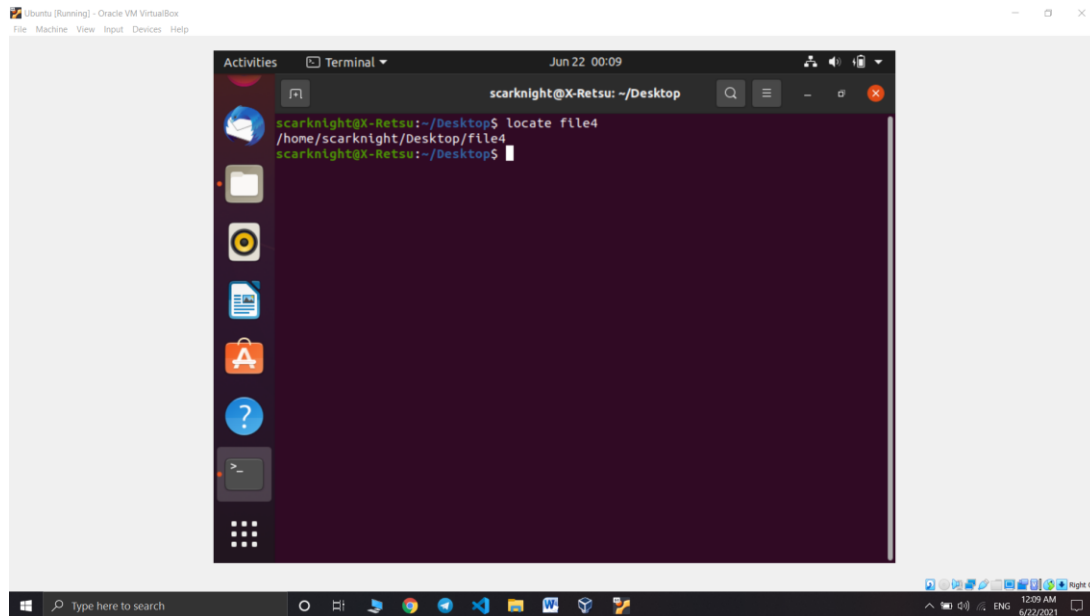


The screenshot shows a terminal window titled "scarknight@X-Retsu: ~/Desktop" with the following commands and output:

```
scarknight@X-Retsu:~/Desktop/NewDirectory$ mv file4 ../
scarknight@X-Retsu:~/Desktop/NewDirectory$ ls
file1 file2 file3 large
scarknight@X-Retsu:~/Desktop/NewDirectory$ cd ../
scarknight@X-Retsu:~/Desktop$ ls
file4 NewDirectory
scarknight@X-Retsu:~/Desktop$
```

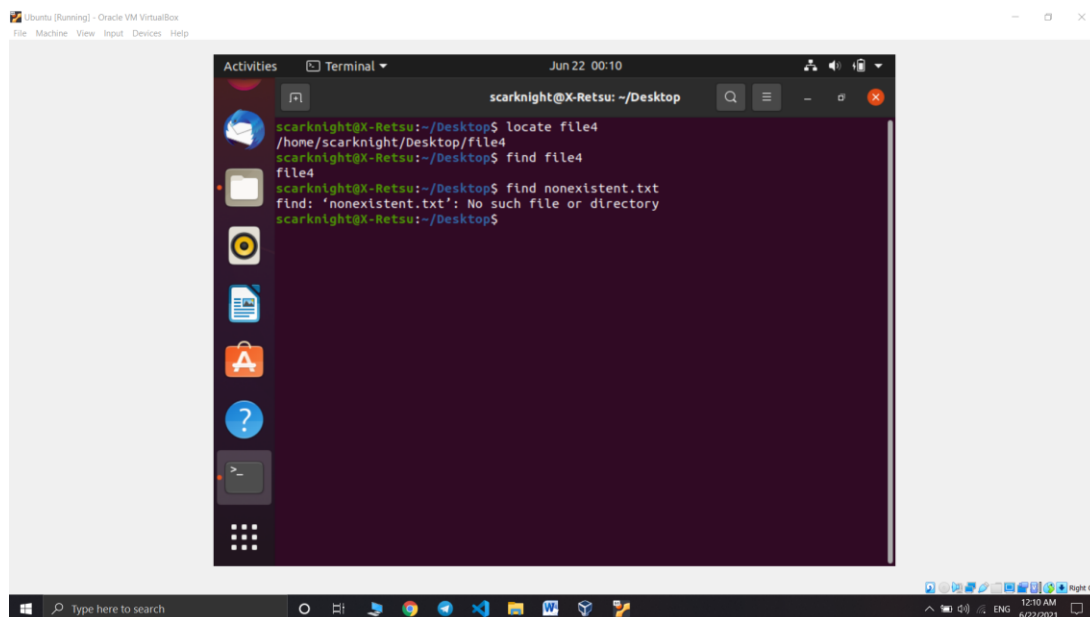
The terminal window is part of an Ubuntu VM running in Oracle VM VirtualBox. The desktop environment includes a sidebar with application icons and a taskbar at the bottom with a search bar and system tray.

## 12. locate



To locate a file, just like the search command in Windows.

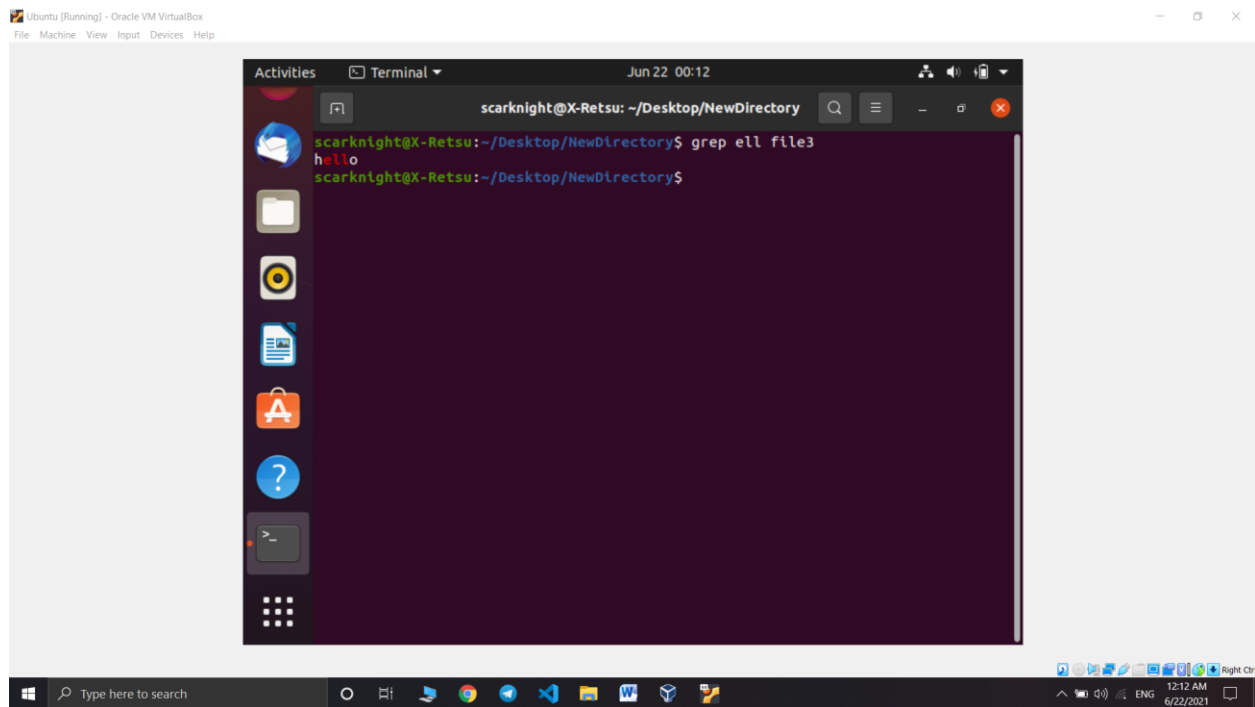
## 13. find



Similar to the locate command, using find also searches for files and directories. The difference is, you use the find command to locate files within a given directory.

## 14. grep

Another basic Linux command that is undoubtedly helpful for everyday use is grep. It helps to search through all the text in a given file

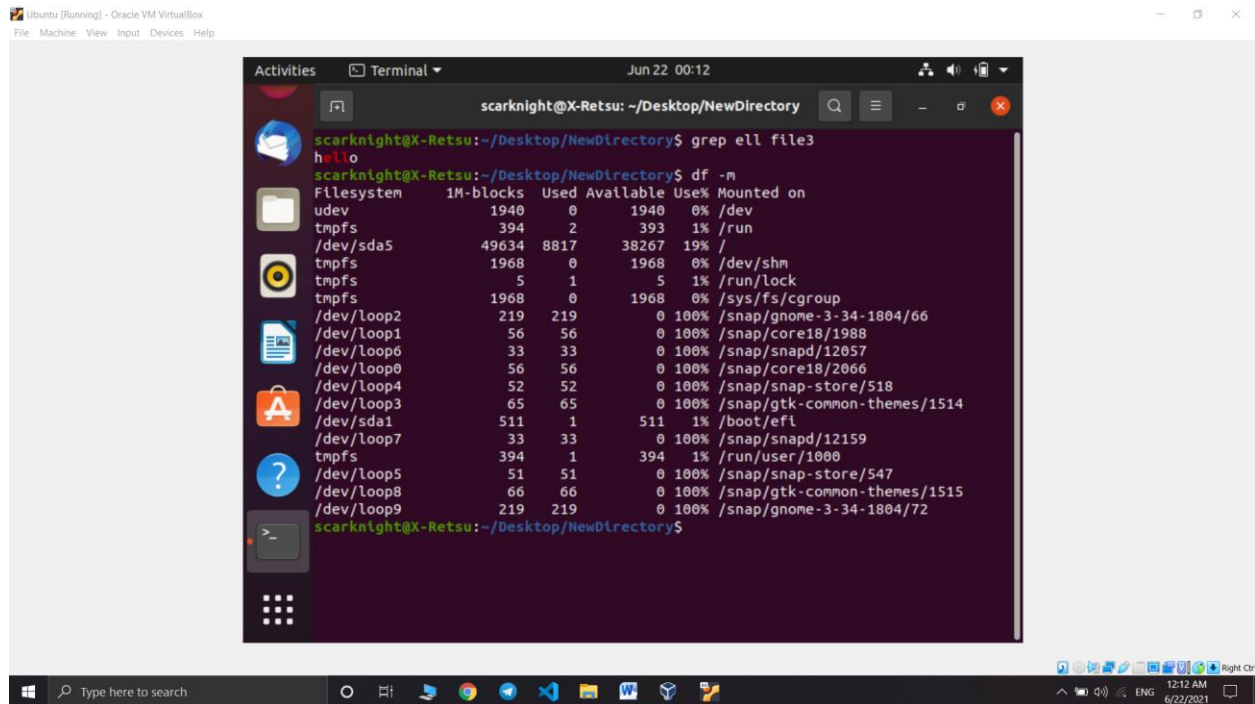


The screenshot shows a terminal window titled "scarknight@X-Retsu: ~/Desktop/NewDirectory" with a search icon and menu options. The terminal output is as follows:

```
scarknight@X-Retsu:~/Desktop/NewDirectory$ grep ell file3
hello
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

The terminal window is part of a larger application window titled "Ubuntu [Running] - Oracle VM VirtualBox". The background shows a desktop environment with a sidebar of application icons (Activities, Files, Firefox, LibreOffice, etc.) and a taskbar at the bottom with a search bar and system tray.

## 15. df



The screenshot shows a terminal window titled "scarknight@X-Retsu: ~/Desktop/NewDirectory". The user has entered the command `df -m`. The output is a table showing disk space usage for various filesystems in megabytes.

Filesystem	1M-blocks	Used	Available	Use%	Mounted on
udev	1940	0	1940	0%	/dev
tmpfs	394	2	393	1%	/run
/dev/sda5	49634	8817	38267	19%	/
tmpfs	1968	0	1968	0%	/dev/shm
tmpfs	5	1	5	1%	/run/lock
tmpfs	1968	0	1968	0%	/sys/fs/cgroup
/dev/loop2	219	219	0	100%	/snap/gnome-3-34-1804/66
/dev/loop1	56	56	0	100%	/snap/core18/1988
/dev/loop6	33	33	0	100%	/snap/snapd/12057
/dev/loop0	56	56	0	100%	/snap/core18/2066
/dev/loop4	52	52	0	100%	/snap/snap-store/518
/dev/sda1	65	65	0	100%	/snap/gtk-common-themes/1514
/dev/loop7	33	33	0	100%	/snap/snapd/12159
tmpfs	394	1	394	1%	/run/user/1000
/dev/loop5	51	51	0	100%	/snap/snap-store/547
/dev/loop8	66	66	0	100%	/snap/gtk-common-themes/1515
/dev/loop9	219	219	0	100%	/snap/gnome-3-34-1804/72

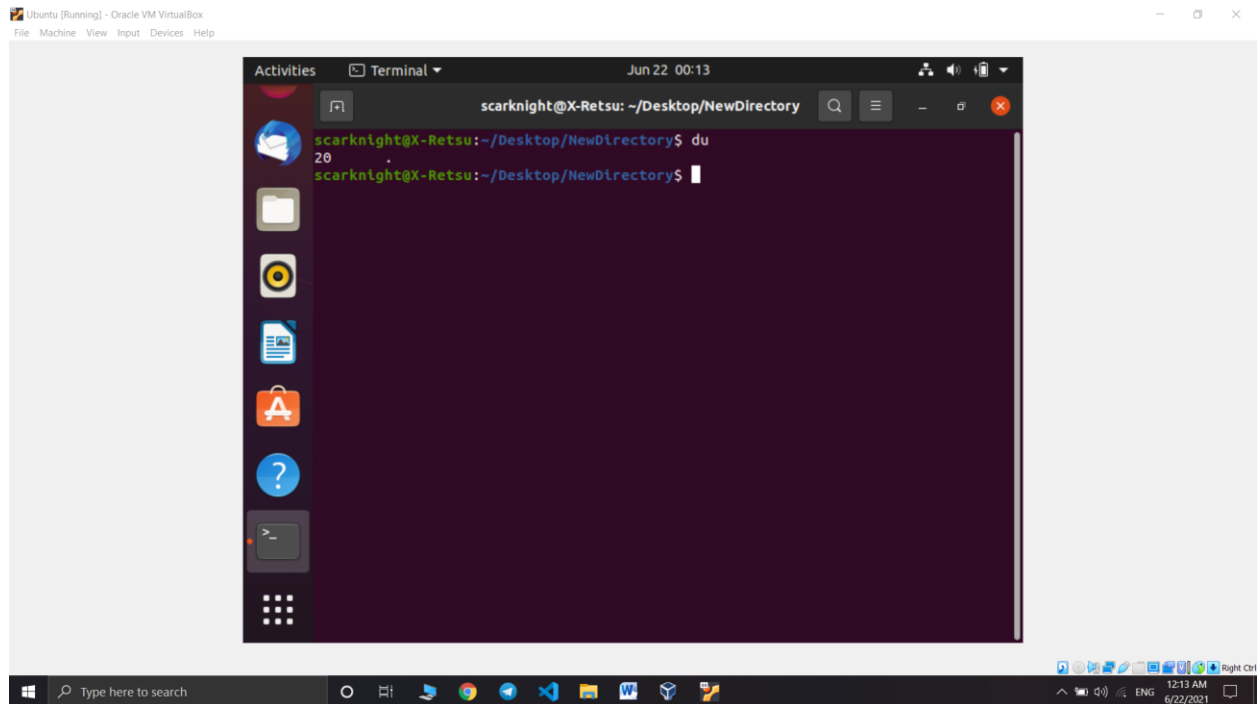
Use `df` command to get a report on the system's disk space usage, shown in

percentage and KBs. If you want to see the report in megabytes, type `df -m`.

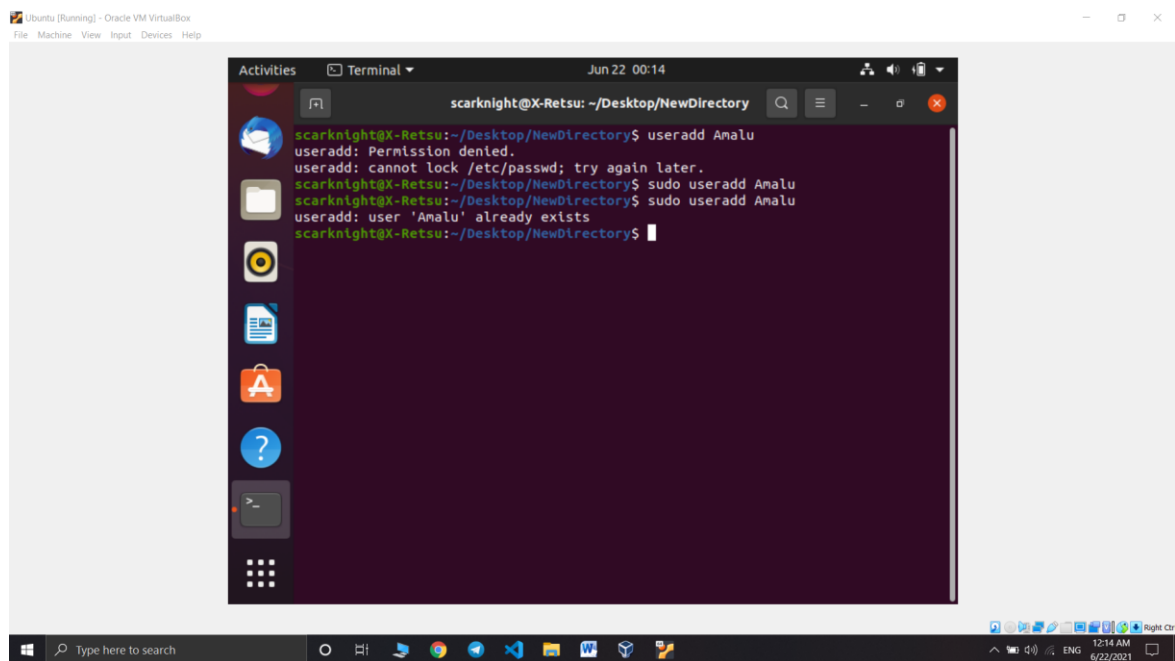
## 16. du

The `du` (Disk Usage) command is used to check how much space a file or a directory takes. However, the disk usage summary will show disk block numbers instead of the usual size format. If you want to see it in bytes, kilobytes, and megabytes, add the `-h` argument to the command line.

## ▪ \$du -h



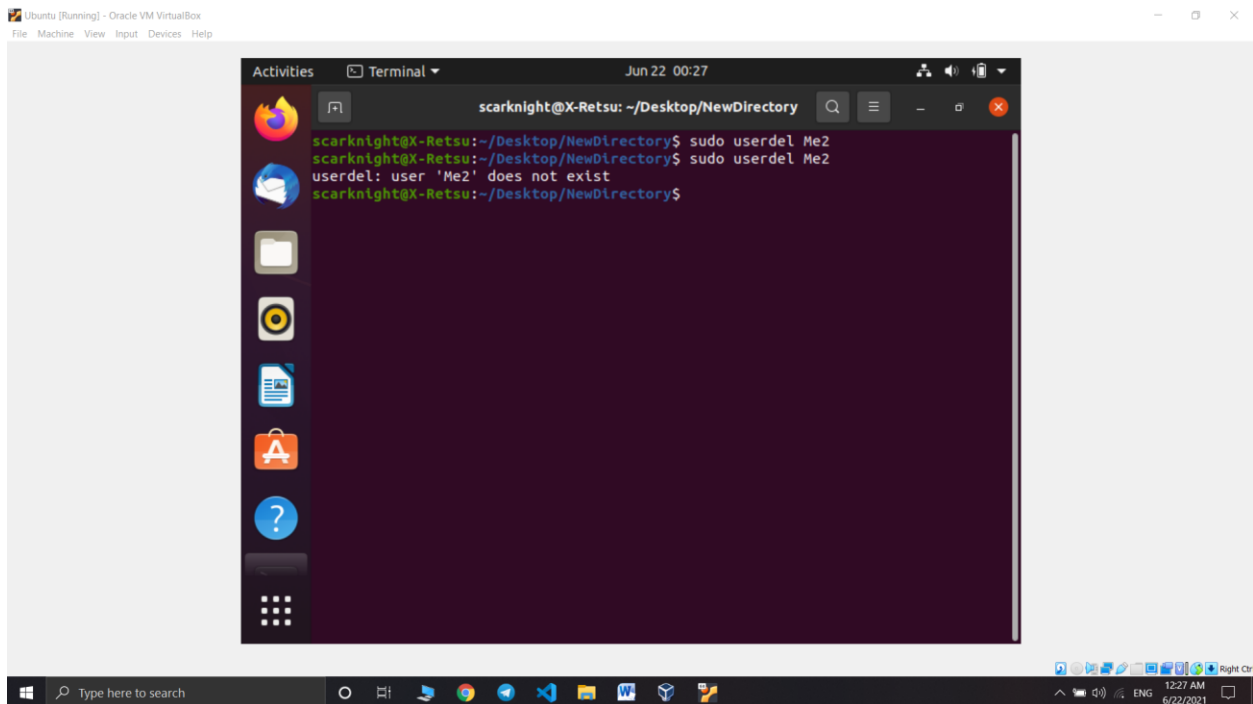
## 17. useradd



The `useradd` is used to create a new user, while `passwd` is adding a password to that user's account. To add a new person named John type, `useradd John` and then to add his password type, `passwd 123456789`

## 18. `userdel`

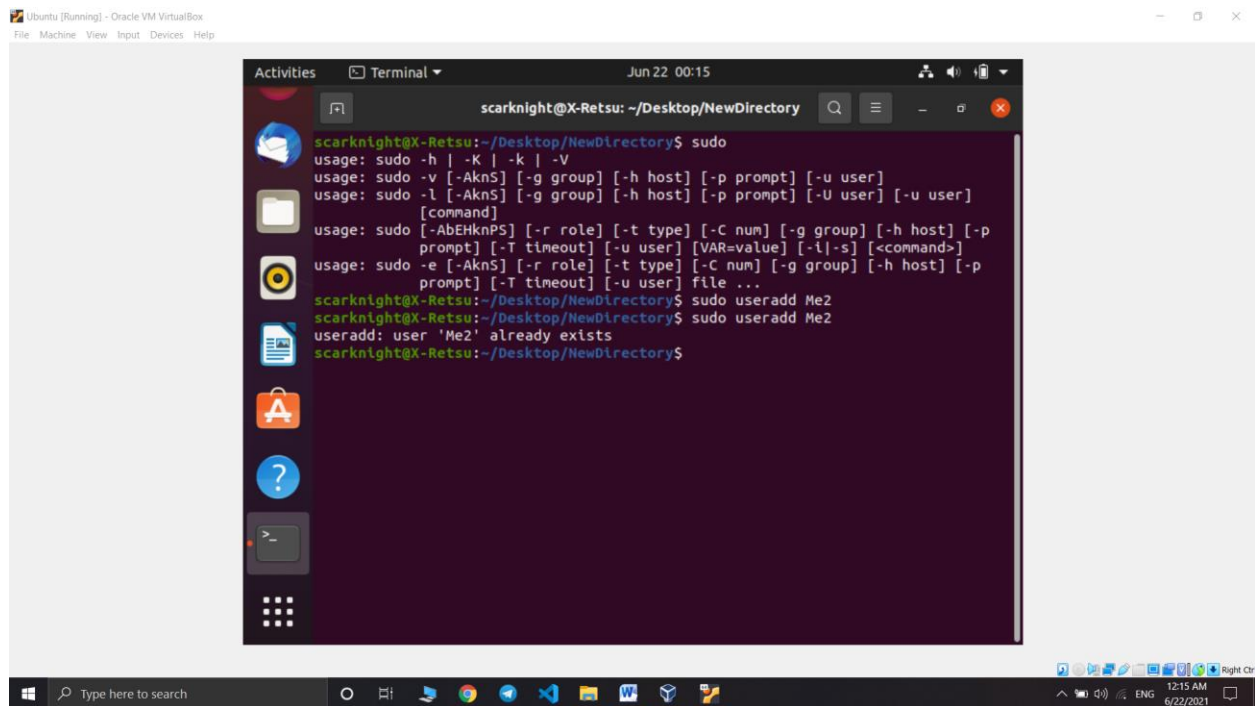
Remove a user is very similar to adding a new user. To delete the users account type, `userdel UserName`



The screenshot shows a terminal window titled "Terminal" with the date and time "Jun 22 00:27". The prompt is "scarknight@X-Retsu: ~/Desktop/NewDirectory". The user enters the command `sudo userdel Me2`. The prompt changes to `scarknight@X-Retsu:~/Desktop/NewDirectory$`. The user enters the command `sudo userdel Me2` again. The prompt changes to `scarknight@X-Retsu:~/Desktop/NewDirectory$`. The output of the command is `userdel: user 'Me2' does not exist`. The terminal window is part of a desktop environment with a sidebar on the left containing icons for Firefox, LibreOffice, and other applications. The bottom of the screen shows a Windows taskbar with the search bar and various application icons.

```
scarknight@X-Retsu:~/Desktop/NewDirectory$ sudo userdel Me2
scarknight@X-Retsu:~/Desktop/NewDirectory$ sudo userdel Me2
userdel: user 'Me2' does not exist
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

## 19. sudo



```
scarknight@X-Retsu: ~/Desktop/NewDirectory
scarknight@X-Retsu:~/Desktop/NewDirectory$ sudo
usage: sudo -h | -K | -k | -V
usage: sudo -v [-AknS] [-g group] [-h host] [-p prompt] [-u user]
usage: sudo -l [-AknS] [-g group] [-h host] [-p prompt] [-U user] [-u user]
[command]
usage: sudo [-AbEHknPS] [-r role] [-t type] [-C num] [-g group] [-h host] [-p
prompt] [-T timeout] [-u user] [VAR=value] [-i|-s] [<command>]
usage: sudo -e [-AknS] [-r role] [-t type] [-C num] [-g group] [-h host] [-p
prompt] [-T timeout] [-u user] file ...
scarknight@X-Retsu:~/Desktop/NewDirectory$ sudo useradd Me2
scarknight@X-Retsu:~/Desktop/NewDirectory$ sudo useradd Me2
useradd: user 'Me2' already exists
scarknight@X-Retsu:~/Desktop/NewDirectory$
```

SuperUser Do(sudo) command enables you to perform tasks that require administrative or root permissions.

## 20. passwd

Changes passwords for user accounts. A normal user may only change the password for their own account, while the superuser may change the password for any account.

```
Activities Terminal Jun 22 00:16
scarknight@X-Retsu: ~/Desktop/NewDirectory
scarknight@X-Retsu:~/Desktop/NewDirectory$ sudo passwd Analu
New password:
Retype new password:
passwd: password updated successfully
scarknight@X-Retsu:~/Desktop/NewDirectory$
```