

# **ASSIGNMENT\_3**

## **NETWORK LAB**

Submitted To:

Meera Miss

Submitted By:

Radhika C

Roll No : 13

RMCA – B Batch

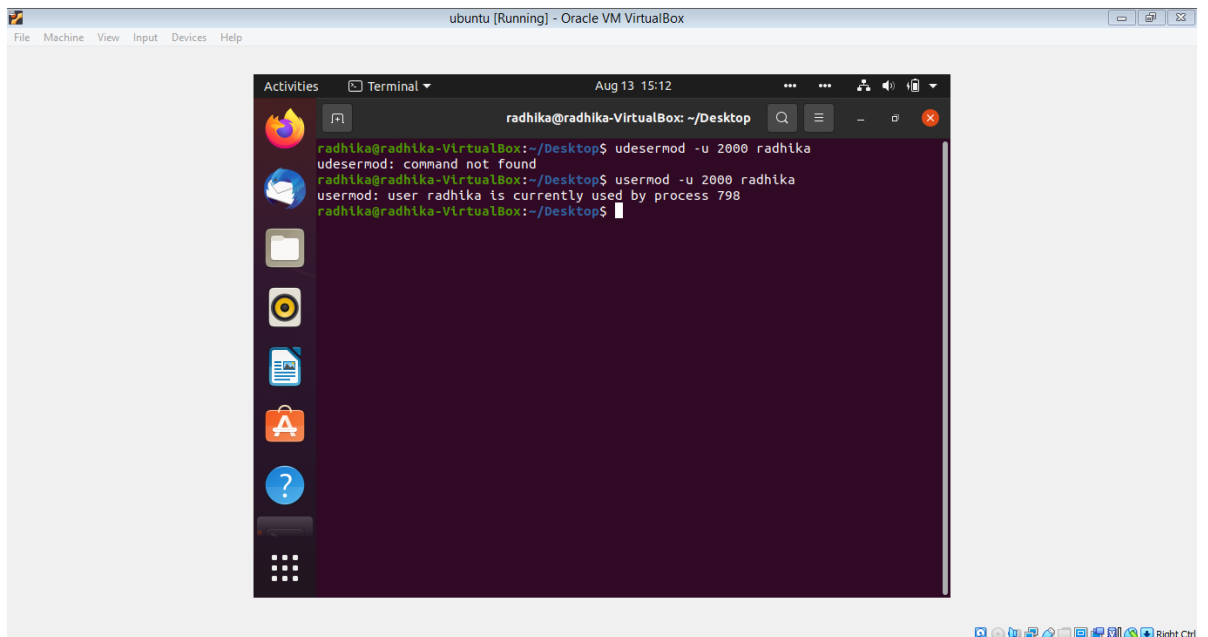
Submitted On:

12/08/2021

# BASIC LINUX COMMANDS

## 1. usermod

- usermod command is used to change the properties of a user in Linux through the command line.
- After creating a user we have to sometimes change their attributes like password or login directory.



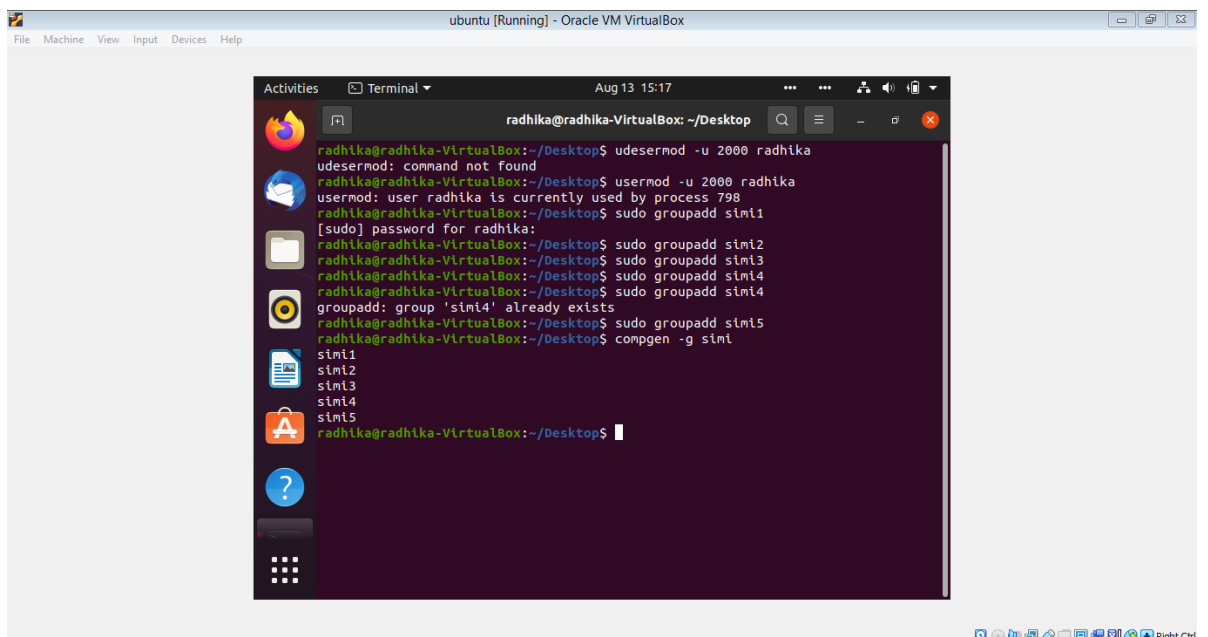
The screenshot shows a terminal window titled "radhika@radhika-VirtualBox: ~/Desktop". The terminal output is as follows:

```
radhika@radhika-VirtualBox:~/Desktop$ udesernod -u 2000 radhika
udesernod: command not found
radhika@radhika-VirtualBox:~/Desktop$ usermod -u 2000 radhika
usermod: user radhika is currently used by process 798
radhika@radhika-VirtualBox:~/Desktop$
```

The terminal window is part of an Ubuntu desktop environment running in Oracle VM VirtualBox. The desktop background is light gray, and the terminal window has a dark purple background. The terminal window title bar shows "ubuntu [Running] - Oracle VM VirtualBox". The terminal window's menu bar includes "File", "Machine", "View", "Input", "Devices", and "Help". The terminal window's status bar shows "Aug 13 15:12". The terminal window's title bar also shows "radhika@radhika-VirtualBox: ~/Desktop". The terminal window's title bar also shows "Terminal". The terminal window's title bar also shows "Aug 13 15:12". The terminal window's title bar also shows "radhika@radhika-VirtualBox: ~/Desktop". The terminal window's title bar also shows "Terminal".

## 2. groupadd

- groupadd command creates a new group account using the values specified on the command line and the default values from the system.
- It can be handled by superuser or root user.



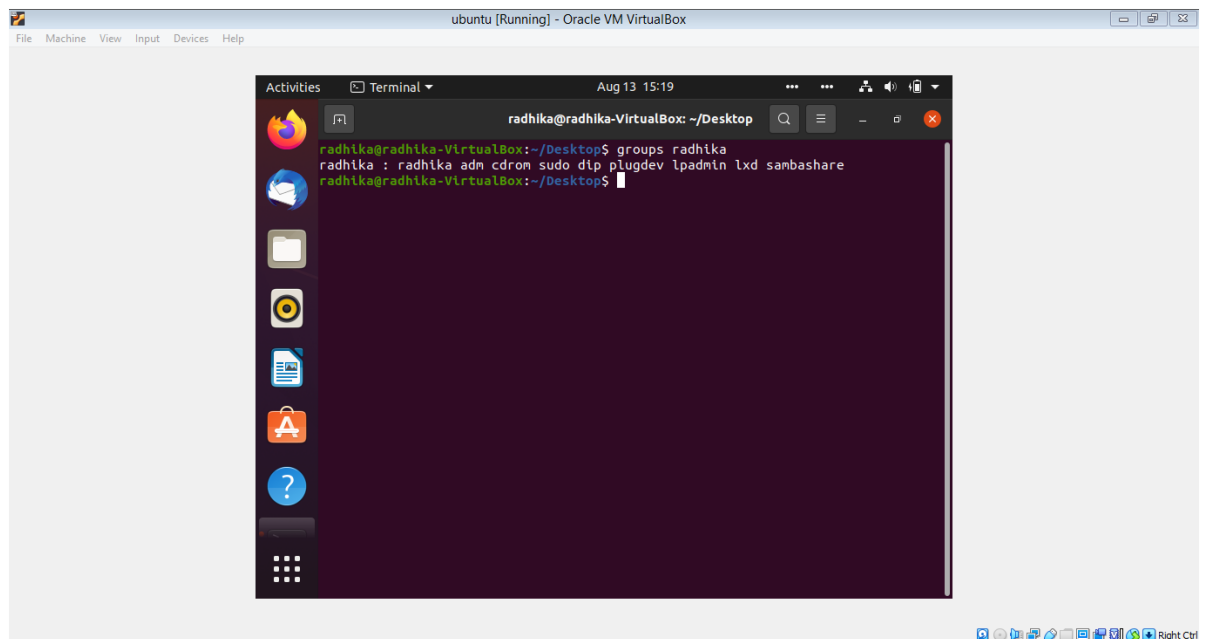
The screenshot shows a terminal window titled "radhika@radhika-VirtualBox: ~/Desktop" with a date and time of "Aug 13 15:17". The terminal displays the following commands and their outputs:

```
radhika@radhika-VirtualBox:~/Desktop$ udesermmod -u 2000 radhika
udesermmod: command not found
radhika@radhika-VirtualBox:~/Desktop$ usermod -u 2000 radhika
usermod: user radhika is currently used by process 798
radhika@radhika-VirtualBox:~/Desktop$ sudo groupadd simi1
[sudo] password for radhika:
radhika@radhika-VirtualBox:~/Desktop$ sudo groupadd simi2
radhika@radhika-VirtualBox:~/Desktop$ sudo groupadd simi3
radhika@radhika-VirtualBox:~/Desktop$ sudo groupadd simi4
radhika@radhika-VirtualBox:~/Desktop$ sudo groupadd simi4
groupadd: group 'simi4' already exists
radhika@radhika-VirtualBox:~/Desktop$ sudo groupadd simi5
radhika@radhika-VirtualBox:~/Desktop$ compgen -g simi
simi1
simi2
simi3
simi4
simi5
radhika@radhika-VirtualBox:~/Desktop$
```

The terminal window is part of an Oracle VM VirtualBox interface, with a menu bar at the top showing "File", "Machine", "View", "Input", "Devices", and "Help". The bottom of the window shows a taskbar with various application icons and a system tray on the right with icons for network, volume, and power, along with the text "Right Ctrl".

### 3. groups

- It print the groups a user is in.
- Groups make it easy to manage users with the same security and access privileges.

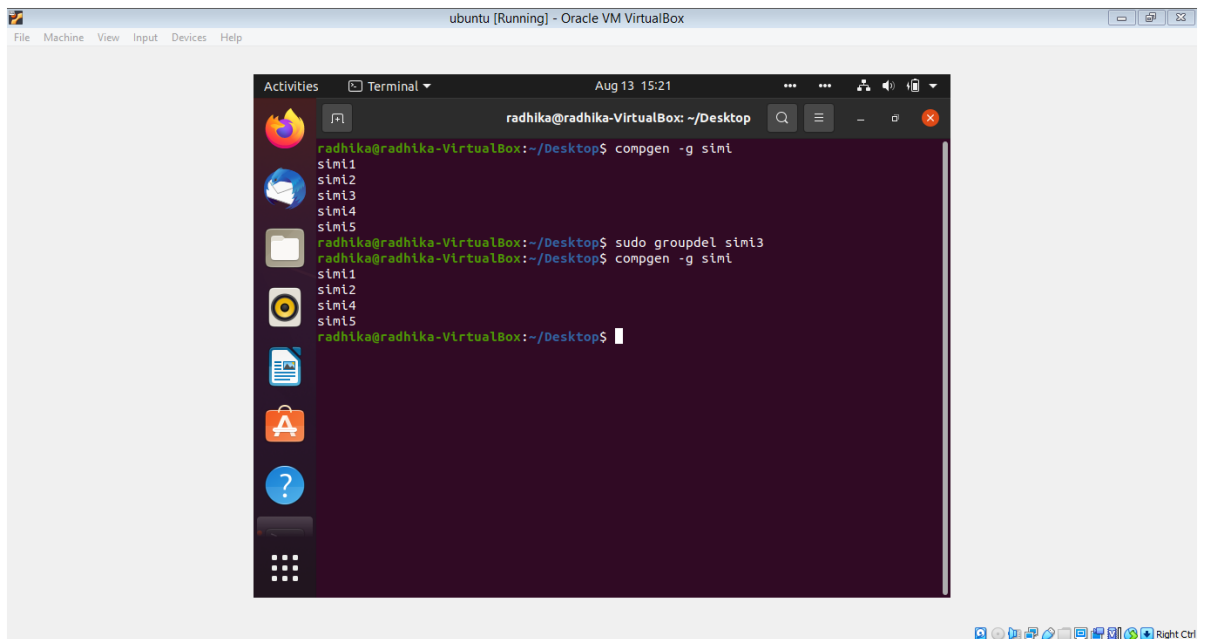


The screenshot shows a terminal window titled "radhika@radhika-VirtualBox: ~/Desktop" running the command `groups radhika`. The output is `radhika : radhika adm cdrom sudo dip plugdev lpadmin lxd sambashare`. The terminal is part of a desktop environment with a sidebar on the left containing icons for Firefox, Mail, Files, and other applications. The window title bar indicates it's an "ubuntu [Running] - Oracle VM VirtualBox" window.

```
radhika@radhika-VirtualBox: ~/Desktop$ groups radhika
radhika : radhika adm cdrom sudo dip plugdev lpadmin lxd sambashare
radhika@radhika-VirtualBox:~/Desktop$
```

## 4. groupdel

- groupdel command modifies the system account files, deleting all entries that refer to group and it is handled by super or root user.



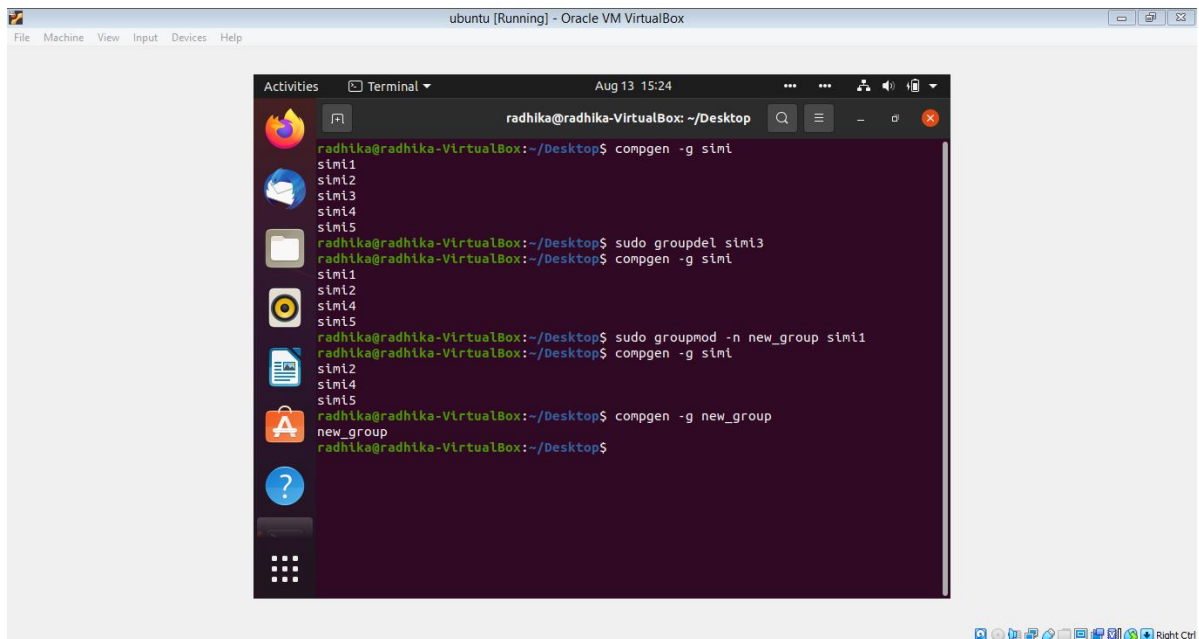
The screenshot shows a terminal window titled "radhika@radhika-VirtualBox: ~/Desktop" running on an Ubuntu system. The terminal displays the following commands and output:

```
radhika@radhika-VirtualBox:~/Desktop$ compgen -g simi
simi1
simi2
simi3
simi4
simi5
radhika@radhika-VirtualBox:~/Desktop$ sudo groupdel simi3
radhika@radhika-VirtualBox:~/Desktop$ compgen -g simi
simi1
simi2
simi4
simi5
radhika@radhika-VirtualBox:~/Desktop$
```

The terminal window is part of an Oracle VM VirtualBox environment, as indicated by the title bar "ubuntu [Running] - Oracle VM VirtualBox". The desktop background is a light gray, and the terminal window has a dark purple background with white text. The terminal window is titled "radhika@radhika-VirtualBox: ~/Desktop". The terminal shows the execution of the `compgen -g simi` command, which lists the groups `simi1`, `simi2`, `simi3`, `simi4`, and `simi5`. Then, the `sudo groupdel simi3` command is executed, and the `compgen -g simi` command is run again, showing that `simi3` has been removed from the list of groups.

## 5. groupmod

- The groupmod command modifies the definition of the specified group by modifying the appropriate entry in the group database.



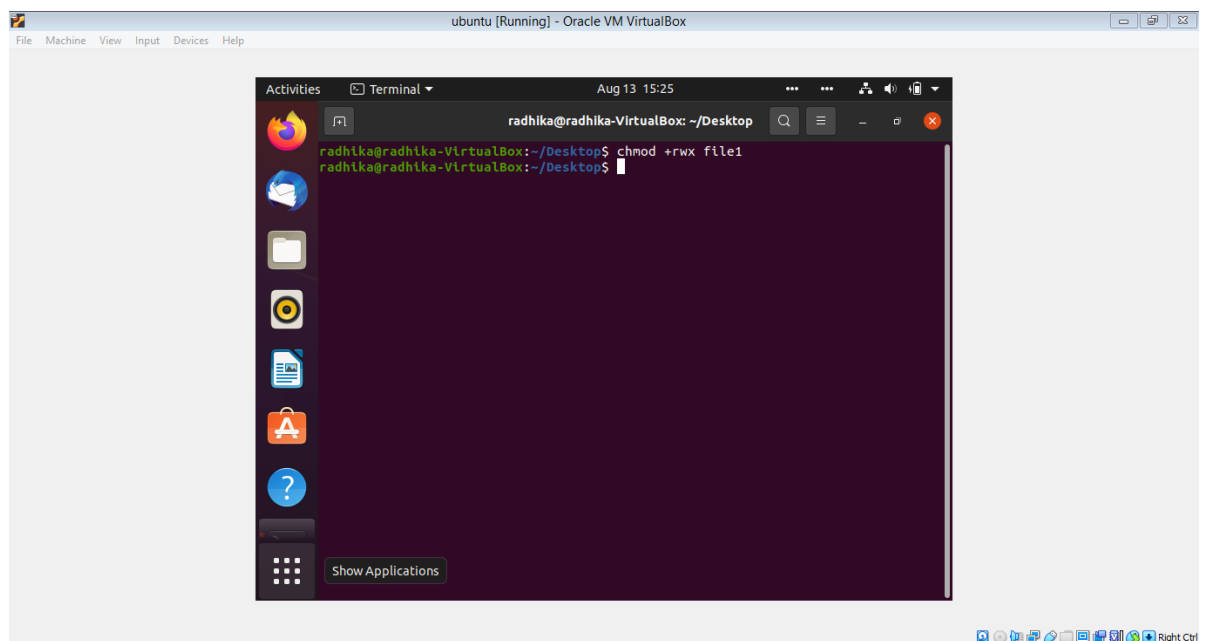
The screenshot shows a terminal window titled "radhika@radhika-VirtualBox: ~/Desktop" with a timestamp of "Aug 13 15:24". The terminal displays the following commands and their outputs:

```
radhika@radhika-VirtualBox:~/Desktop$ compgen -g sim1
sim1
sim2
sim3
sim4
sim5
radhika@radhika-VirtualBox:~/Desktop$ sudo groupdel sim3
radhika@radhika-VirtualBox:~/Desktop$ compgen -g sim1
sim1
sim2
sim4
sim5
radhika@radhika-VirtualBox:~/Desktop$ sudo groupmod -n new_group sim1
radhika@radhika-VirtualBox:~/Desktop$ compgen -g sim1
sim2
sim4
sim5
radhika@radhika-VirtualBox:~/Desktop$ compgen -g new_group
new_group
radhika@radhika-VirtualBox:~/Desktop$
```

The terminal window is part of an Ubuntu [Running] - Oracle VM VirtualBox environment. The left sidebar shows the "Activities" menu with icons for Firefox, a file manager, a terminal, and a help icon. The bottom status bar includes system icons and a "Right Ctrl" key indicator.

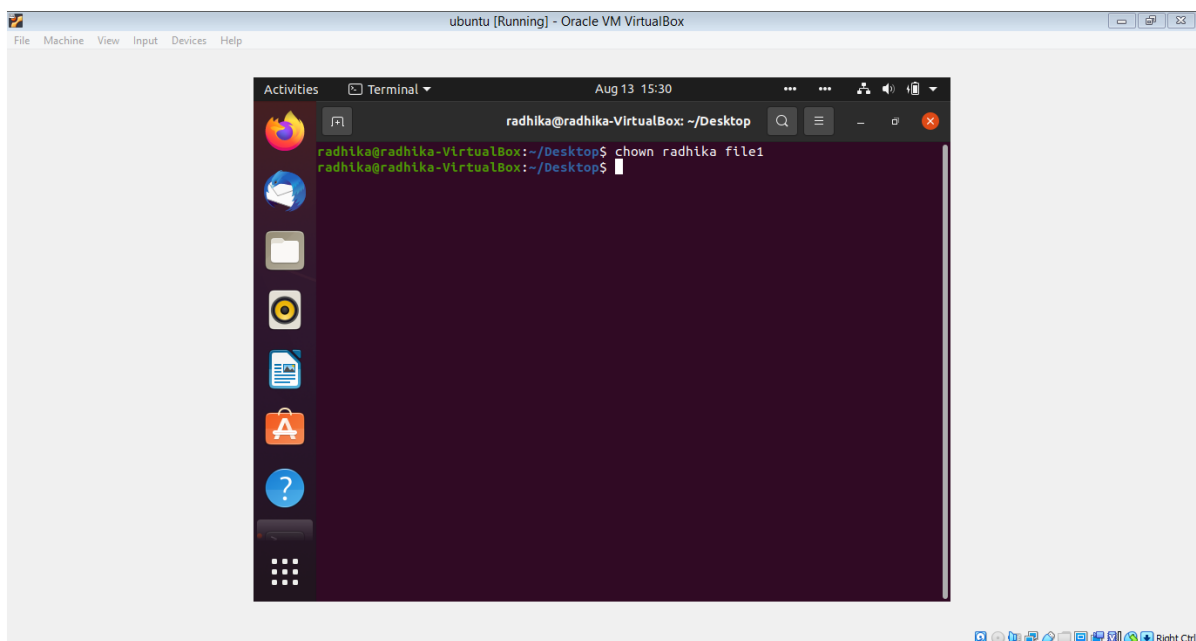
## 6. chmod

- Stands for change mode
- To change directory permissions of file or directory in Linux.



## 7. chown

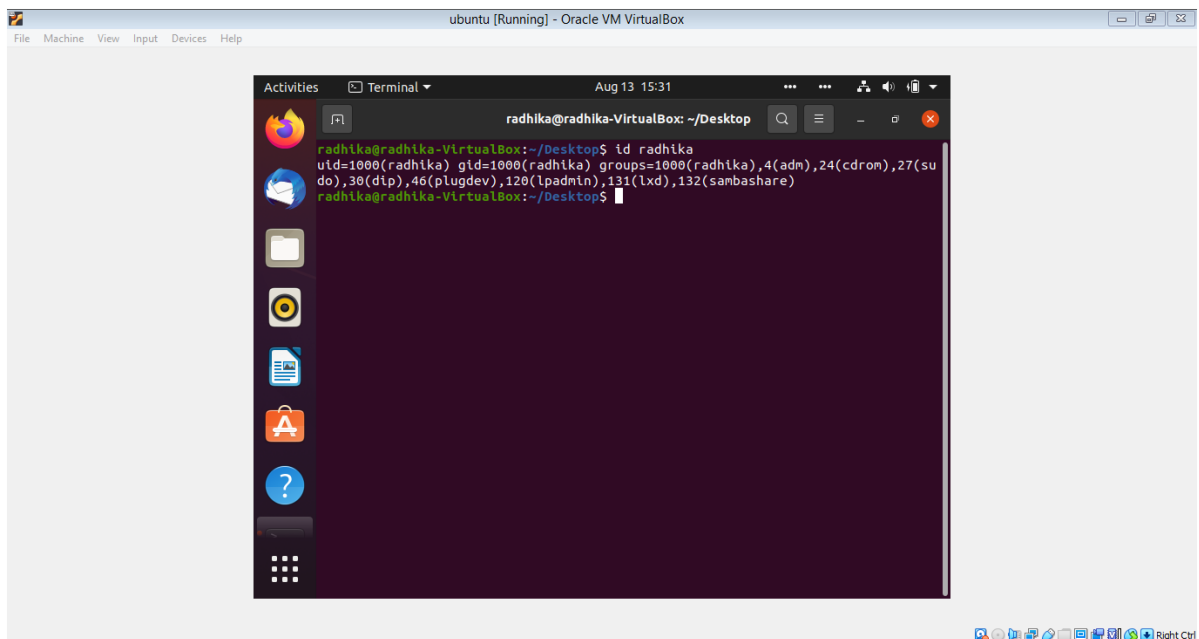
- The chown command allows you to change the user and/or group ownership of a given file, directory.





## 8. id

- id command in Linux is used to find out user and group names and numeric ID's (UID or group ID) of the current user.



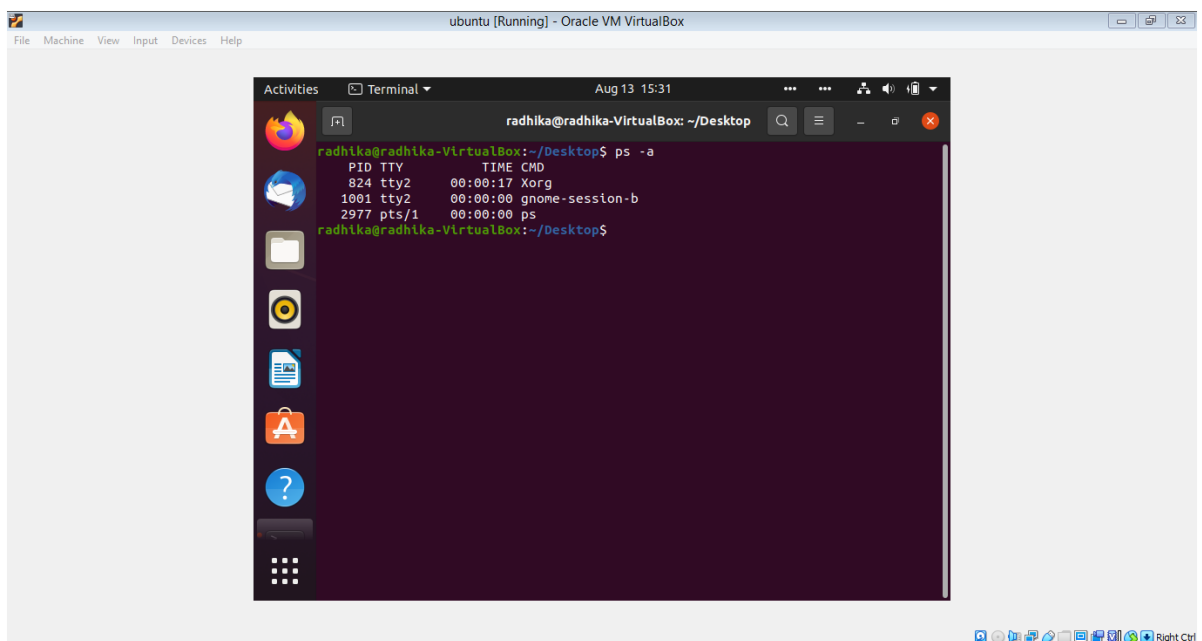
The screenshot shows a terminal window titled "radhika@radhika-VirtualBox: ~/Desktop" running the command `id radhika`. The output is as follows:

```
radhika@radhika-VirtualBox:~/Desktop$ id radhika
uid=1000(radhika) gid=1000(radhika) groups=1000(radhika),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),120(lpadmin),131(lxd),132(sambashare)
radhika@radhika-VirtualBox:~/Desktop$
```

The terminal window is part of an Ubuntu desktop environment within a VirtualBox VM. The desktop has a dark theme and a sidebar with application icons. The window title bar indicates the VM is running on Oracle VM VirtualBox.

## 9. ps

- Stands for Process Status.
- It is a command line utility that is used to display or view information related to the processes running in a Linux system.



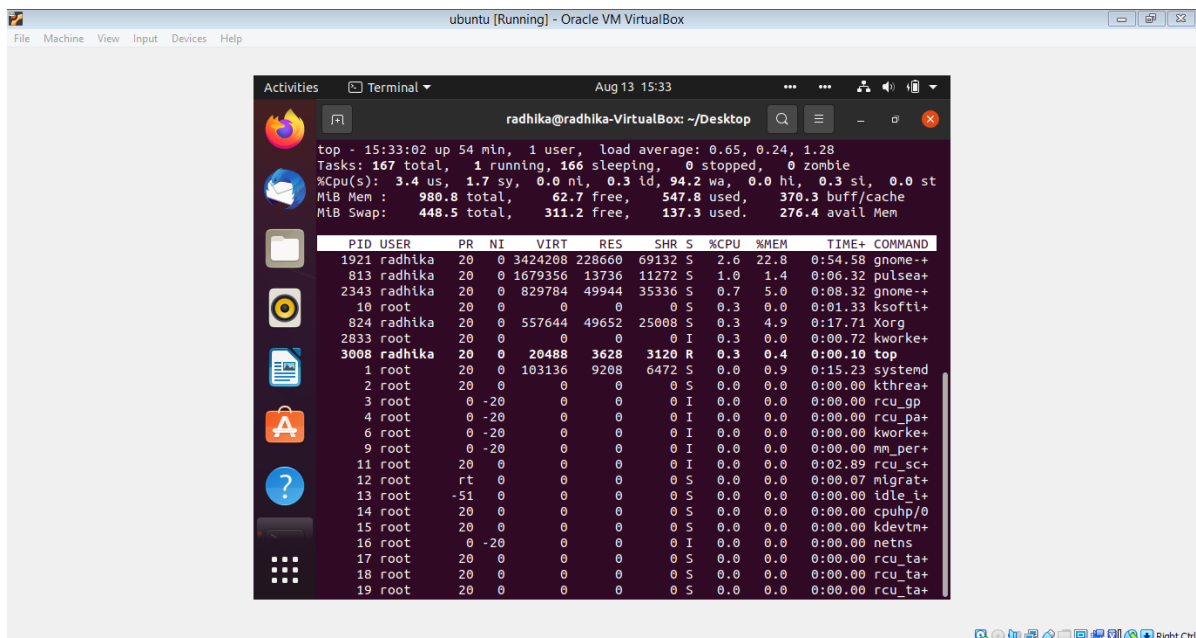
The screenshot shows a terminal window titled "radhika@radhika-VirtualBox: ~/Desktop" with the date and time "Aug 13 15:31". The terminal displays the output of the command "ps -a". The output is as follows:

```
radhika@radhika-VirtualBox:~/Desktop$ ps -a
PID TTY          TIME CMD
 824 tty2        00:00:17 Xorg
1001 tty2        00:00:00 gnome-session-b
2977 pts/1        00:00:00 ps
radhika@radhika-VirtualBox:~/Desktop$
```

The terminal window is part of a larger application window titled "ubuntu [Running] - Oracle VM VirtualBox". The application has a menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". The terminal window also has a sidebar with various icons and a bottom status bar showing system icons and the text "Right Ctrl".

## 10. top

- top command is used to show the Linux processes.
- It provides a dynamic real-time view of the running system



The screenshot shows a terminal window titled 'radhika@radhika-VirtualBox: ~/Desktop' running the 'top' command. The output displays system statistics and a list of running processes. The system statistics include: top - 15:33:02 up 54 min, 1 user, load average: 0.65, 0.24, 1.28; Tasks: 167 total, 1 running, 166 sleeping, 0 stopped, 0 zombie; %Cpu(s): 3.4 us, 1.7 sy, 0.0 ni, 0.3 id, 94.2 wa, 0.0 hi, 0.3 si, 0.0 st; MiB Mem: 980.8 total, 62.7 free, 547.8 used, 370.3 buff/cache; MiB Swap: 448.5 total, 311.2 free, 137.3 used, 276.4 avail Mem.

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1921	radhika	20	0	3424208	228660	69132	S	2.6	22.8	0:54.58	gnome-+
813	radhika	20	0	1679356	13736	11272	S	1.0	1.4	0:06.32	pulsea+
2343	radhika	20	0	829784	49944	35336	S	0.7	5.0	0:08.32	gnome-+
10	root	20	0	0	0	0	S	0.3	0.0	0:01.33	ksoftt+
824	radhika	20	0	557644	49652	25008	S	0.3	4.9	0:17.71	Xorg
2833	root	20	0	0	0	0	I	0.3	0.0	0:00.72	kworke+
3008	radhika	20	0	20488	3628	3120	R	0.3	0.4	0:00.10	top
1	root	20	0	103136	9208	6472	S	0.0	0.9	0:15.23	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthrea+
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_pa+
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworke+
9	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_per+
11	root	20	0	0	0	0	I	0.0	0.0	0:02.89	rcu_sc+
12	root	rt	0	0	0	0	S	0.0	0.0	0:00.07	migrat+
13	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle i+
14	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/0
15	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kdevtm+
16	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
17	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_ta+
18	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_ta+
19	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_ta+