

Basic Linux Commands

Submitted By

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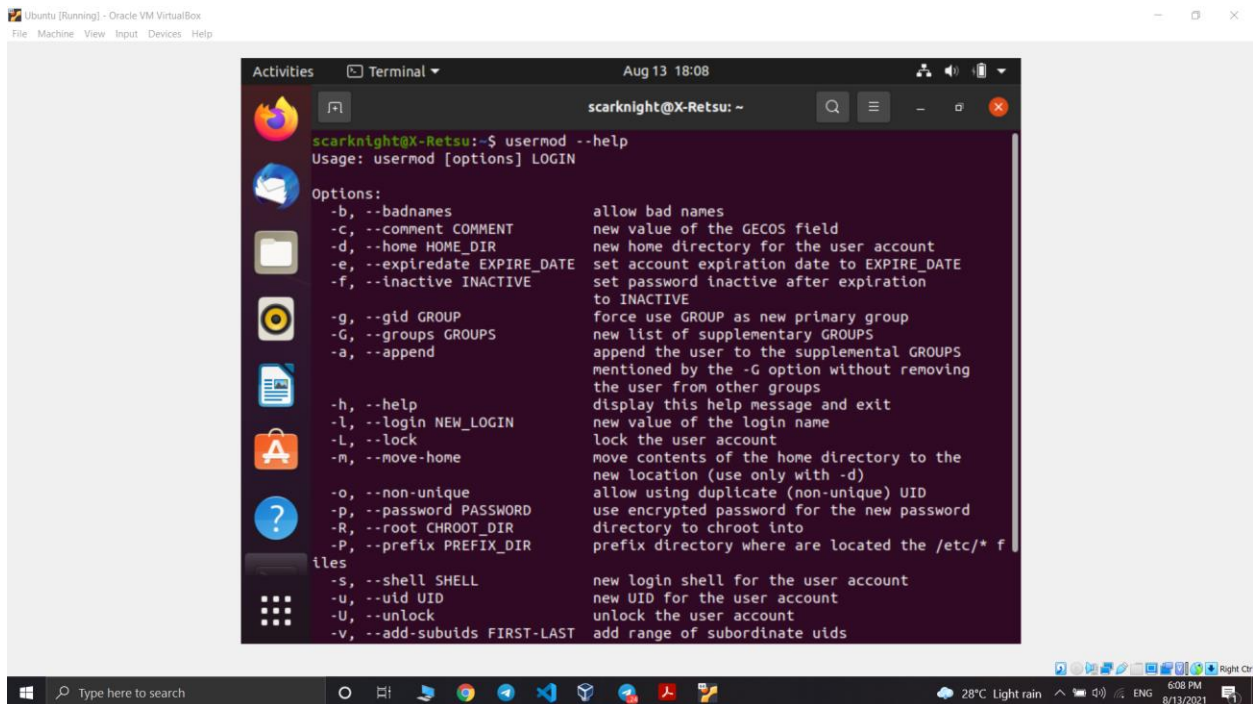
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MCA – A[S2]

Basic Linux Commands

1. usermod

- usermod command is used to change the properties of a user in Linux through the command line
- command-line utility that allows you to modify a user's login information
- `#usermod -help`
- `#usermod -u 2000 Tom`



The screenshot shows a terminal window titled "Terminal" with the prompt "scarknight@X-Retsu: ~". The command `usermod --help` has been executed, displaying the following output:

```
scarknight@X-Retsu:~$ usermod --help
Usage: usermod [options] LOGIN

Options:
-b, --badnames          allow bad names
-c, --comment COMMENT   new value of the GECOS field
-d, --home HOME_DIR     new home directory for the user account
-e, --expiredate EXPIRE_DATE set account expiration date to EXPIRE_DATE
-f, --inactive INACTIVE set password inactive after expiration
                        to INACTIVE
-g, --gid GROUP          force use GROUP as new primary group
-G, --groups GROUPS      new list of supplementary GROUPS
-a, --append             append the user to the supplemental GROUPS
                        mentioned by the -G option without removing
                        the user from other groups
-h, --help              display this help message and exit
-l, --login NEW_LOGIN    new value of the login name
-L, --lock              lock the user account
-m, --move-home          move contents of the home directory to the
                        new location (use only with -d)
-o, --non-unique         allow using duplicate (non-unique) UID
-p, --password PASSWORD use encrypted password for the new password
-R, --root CHROOT_DIR    directory to chroot into
-P, --prefix PREFIX_DIR  prefix directory where are located the /etc/* f
les
-s, --shell SHELL        new login shell for the user account
-u, --uid UID            new UID for the user account
-U, --unlock            unlock the user account
-v, --add-subuids FIRST-LAST add range of subordinate uids
```

```
scarknight@X-Retsu: ~  
-f, --inactive INACTIVE      set password inactive after expiration  
                             to INACTIVE  
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-h, --help                    display this help message and exit  
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-u, --uid UID                 new UID for the user account  
-U, --unlock                  unlock the user account  
-v, --add-subuids FIRST-LAST add range of subordinate uids  
-V, --del-subuids FIRST-LAST remove range of subordinate uids  
-w, --add-subgids FIRST-LAST add range of subordinate gids  
-W, --del-subgids FIRST-LAST remove range of subordinate gids  
-Z, --selinux-user SEUSER     new SELinux user mapping for the user account  
scarknight@X-Retsu:~$ usermod -u 2000 scarknight  
usermod: user scarknight is currently used by process 1858  
scarknight@X-Retsu:~$
```

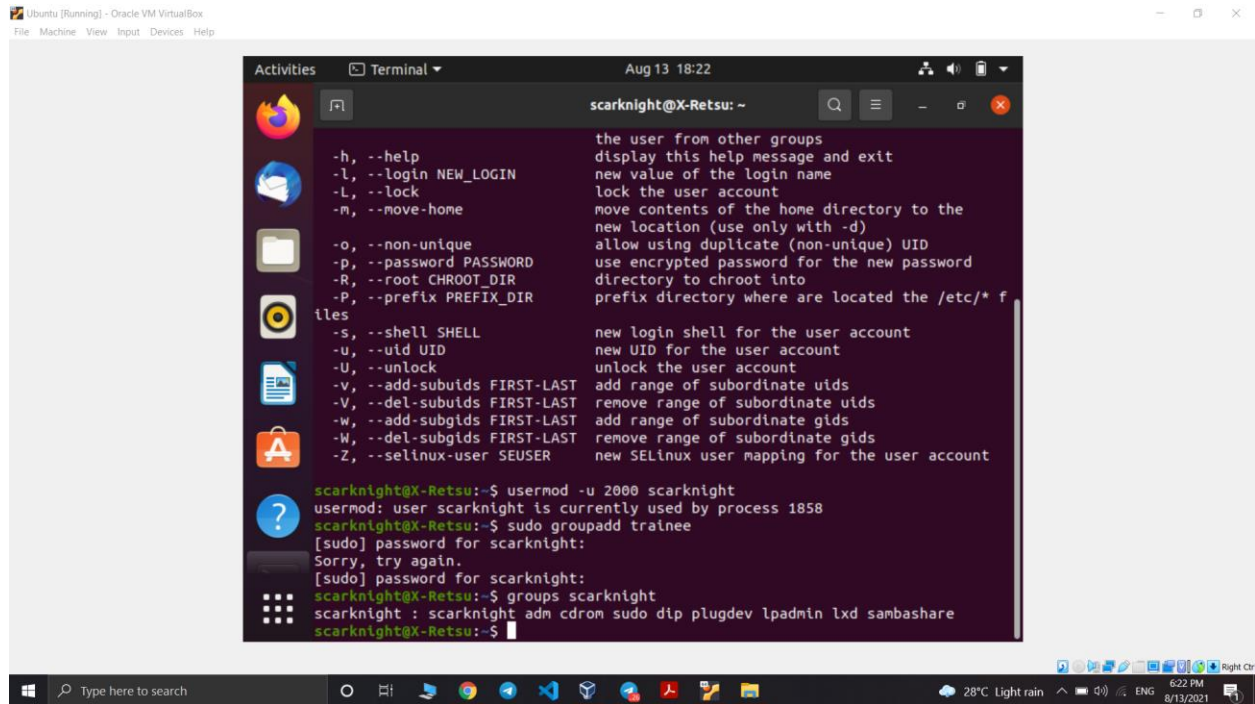
2. groupadd ▪ groupadd command creates a new group account using the values specified on the command line and the default values from the system.

▪ #groupadd trainee

```
scarknight@X-Retsu: ~  
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-G, --groups GROUPS          new list of supplementary GROUPS  
-a, --append                  append the user to the supplemental GROUPS  
                             mentioned by the -G option without removing  
                             the user from other groups  
-h, --help                    display this help message and exit  
-l, --login NEW_LOGIN         new value of the login name  
-L, --lock                    lock the user account  
-m, --move-home               move contents of the home directory to the  
                             new location (use only with -d)  
-o, --non-unique              allow using duplicate (non-unique) UID  
-p, --password PASSWORD       use encrypted password for the new password  
-R, --root CHROOT_DIR         directory to chroot into  
-P, --prefix PREFIX_DIR       prefix directory where are located the /etc/* f  
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-s, --shell SHELL             new login shell for the user account  
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-Z, --selinux-user SEUSER     new SELinux user mapping for the user account  
scarknight@X-Retsu:~$ usermod -u 2000 scarknight  
usermod: user scarknight is currently used by process 1858  
scarknight@X-Retsu:~$ sudo groupadd trainee  
[sudo] password for scarknight:
```

3. groups – print the groups a user is in

- #groups alice

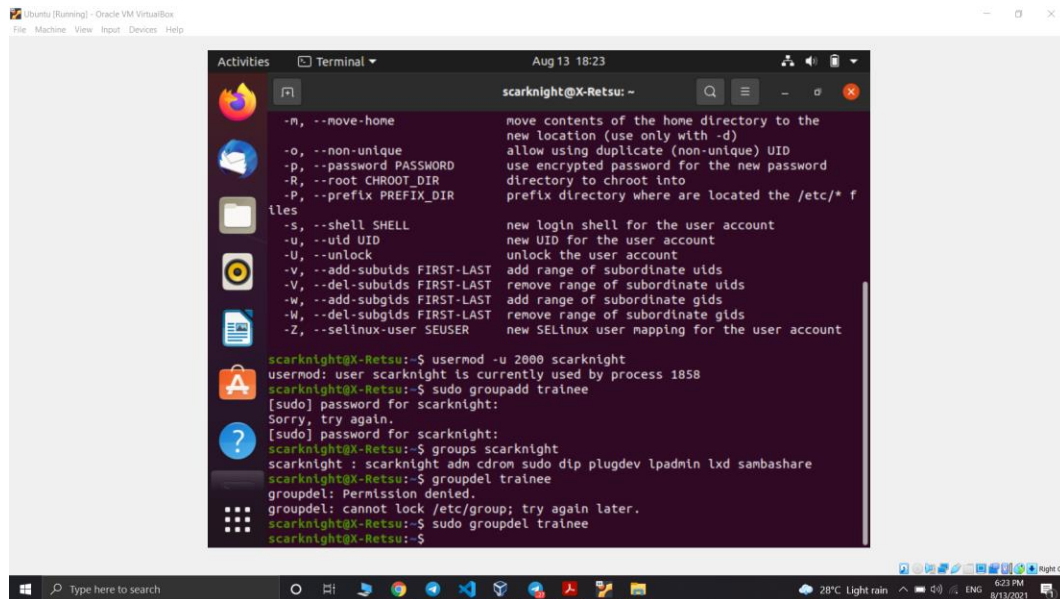


The screenshot shows a terminal window titled 'scarknight@X-Retsu: ~' with a search bar and window controls. The terminal displays the output of the 'groups' command for the user 'scarknight', which lists the groups: 'scarknight : scarknight adm cdrom sudo dip plugdev lpadmin lxd sambashare'. Above this, the terminal shows the command 'groups scarknight' and its output. The terminal also displays the 'usermod' command and its output, indicating that the user 'scarknight' is currently used by process 1858. The terminal window is part of a larger application window titled 'Ubuntu [Running] - Oracle VM VirtualBox' with a menu bar (File, Machine, View, Input, Devices, Help) and a status bar at the bottom showing system information (28°C, Light rain, 6:22 PM, 8/13/2021).

```
scarknight@X-Retsu: ~  
-h, --help                the user from other groups  
-l, --login NEW_LOGIN     display this help message and exit  
-L, --lock                new value of the login name  
-n, --move-home           lock the user account  
                           move contents of the home directory to the  
                           new location (use only with -d)  
-o, --non-unique          allow using duplicate (non-unique) UID  
-p, --password PASSWORD   use encrypted password for the new password  
-R, --root CHROOT_DIR     directory to chroot into  
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-W, --del-subgids FIRST-LAST remove range of subordinate gids  
-Z, --selinux-user SEUSER new SELinux user mapping for the user account  
  
scarknight@X-Retsu:~$ usermod -u 2000 scarknight  
usermod: user scarknight is currently used by process 1858  
scarknight@X-Retsu:~$ sudo groupadd trainee  
[sudo] password for scarknight:  
Sorry, try again.  
[sudo] password for scarknight:  
scarknight@X-Retsu:~$ groups scarknight  
scarknight : scarknight adm cdrom sudo dip plugdev lpadmin lxd sambashare  
scarknight@X-Retsu:~$
```

4. groupdel

- groupdel command modifies the system account files, deleting all entries that refer to group. The named group must exist
- #groupdel marketing

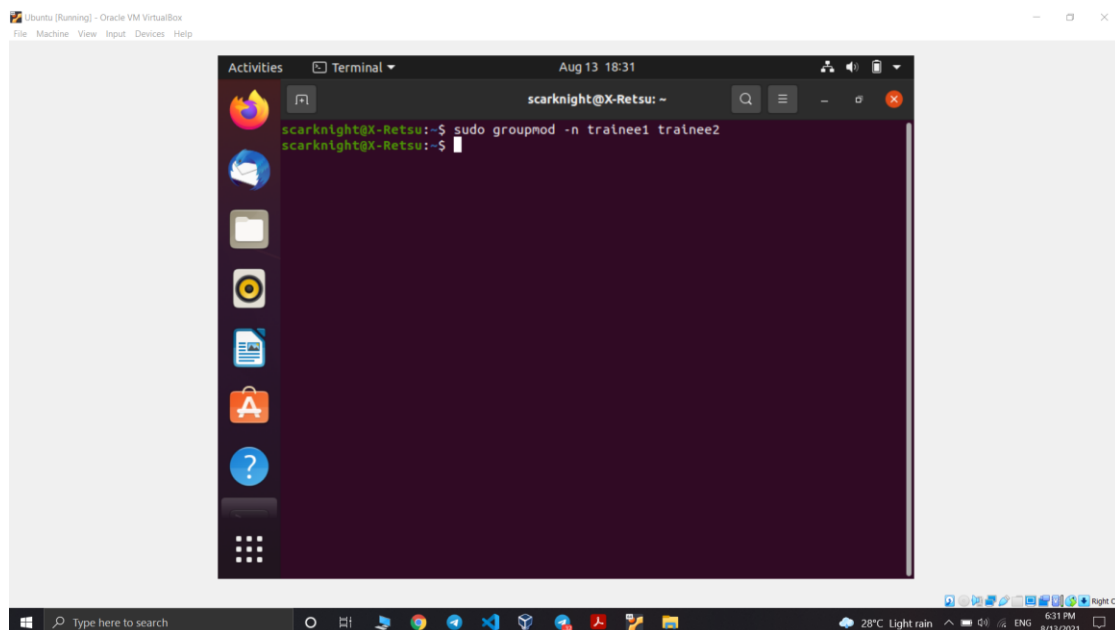


```
scarknight@X-Retsu: ~  
-n, --move-home          move contents of the home directory to the  
                          new location (use only with -d)  
-o, --non-unique          allow using duplicate (non-unique) UID  
-p, --password PASSWORD  use encrypted password for the new password  
-R, --root CHROOT_DIR    directory to chroot into  
-P, --prefix PREFIX_DIR  prefix directory where are located the /etc/* f  
files  
-s, --shell SHELL        new login shell for the user account  
-u, --uid UID            new UID for the user account  
-U, --unlock             unlock the user account  
-v, --add-subuids FIRST-LAST add range of subordinate uids  
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-w, --add-subgids FIRST-LAST add range of subordinate gids  
-W, --del-subgids FIRST-LAST remove range of subordinate gids  
-Z, --selinux-user SEUSER new SELinux user mapping for the user account  
  
scarknight@X-Retsu:~$ usermod -u 2000 scarknight  
usermod: user scarknight is currently used by process 1058  
scarknight@X-Retsu:~$ sudo groupadd trainee  
[sudo] password for scarknight:  
Sorry, try again.  
[sudo] password for scarknight:  
scarknight@X-Retsu:~$ groups scarknight  
scarknight : scarknight adm cdrom sudo dip plugdev lpadmin lxd sambashare  
scarknight@X-Retsu:~$ groupdel trainee  
groupdel: Permission denied.  
groupdel: cannot lock /etc/group; try again later.  
scarknight@X-Retsu:~$ sudo groupdel trainee  
scarknight@X-Retsu:~$
```

5. groupmod

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

groupmod -n group1 group2



```
scarknight@X-Retsu: ~  
scarknight@X-Retsu:~$ sudo groupmod -n trainee1 trainee2  
scarknight@X-Retsu:~$
```

6. chmod

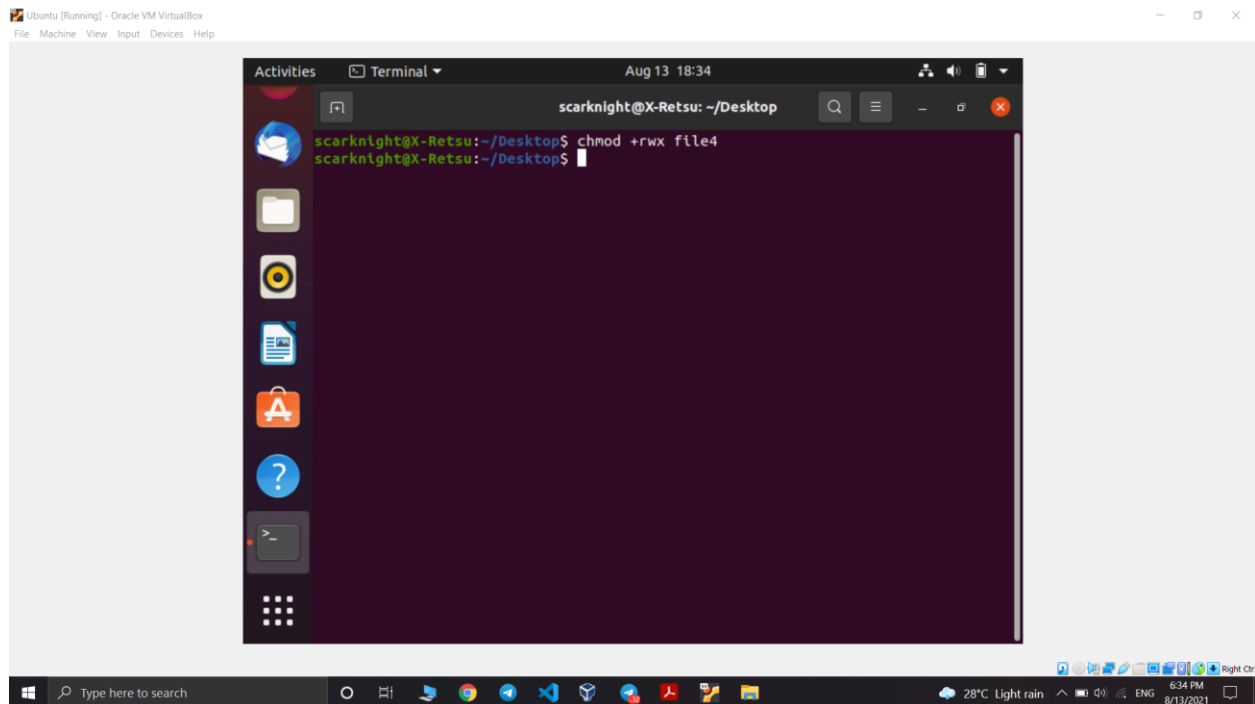
- To change directory permissions of file/ Directory in Linux.

#chmod whowhatwhich file/directory

- chmod +rwx filename to add permissions.
- chmod -rwx directoryname to remove permissions.
- chmod +x filename to allow executable permissions.
- chmod -wx filename to take out write and executable permissions.

#chmod u+x test

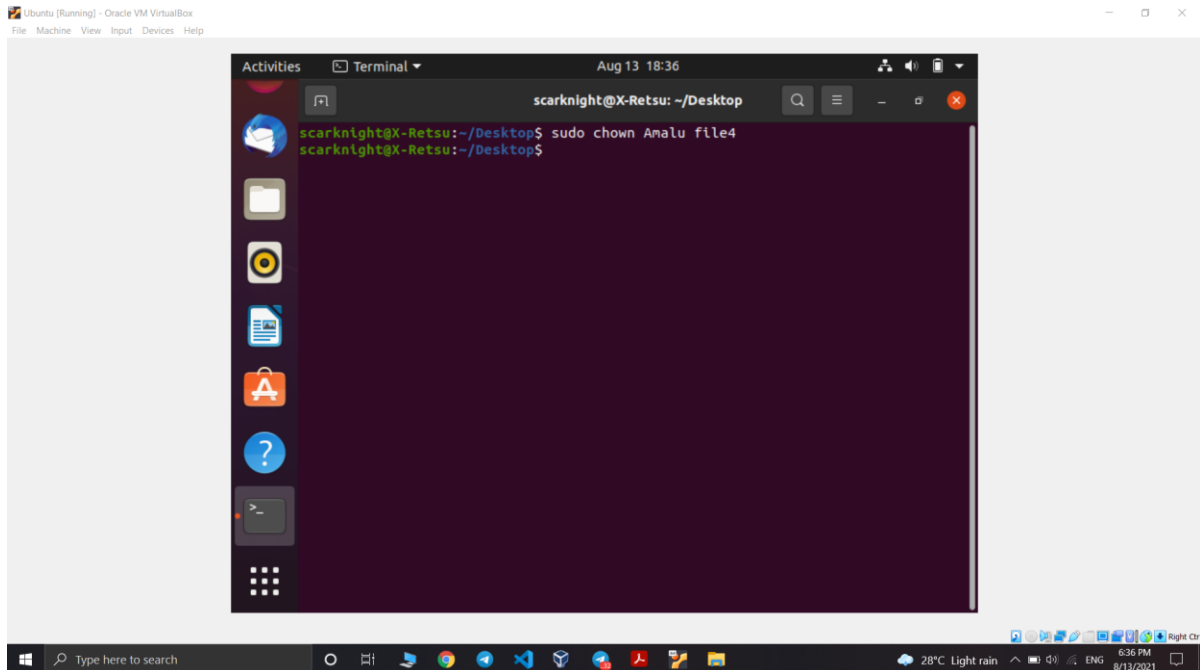
#chmod g-rwx test #chmod o-r test 4



7. chown

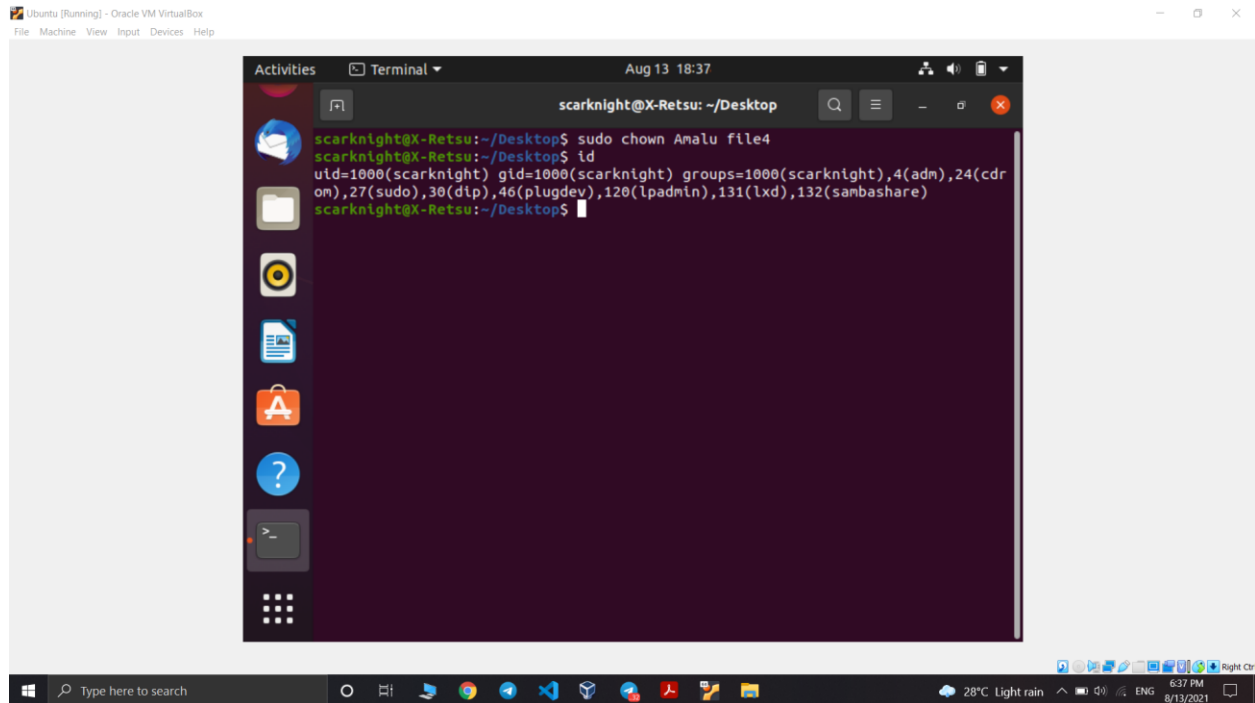
- The chown command allows you to change the user and/or group ownership of a given file, directory.

#chown Tom Test



8. id

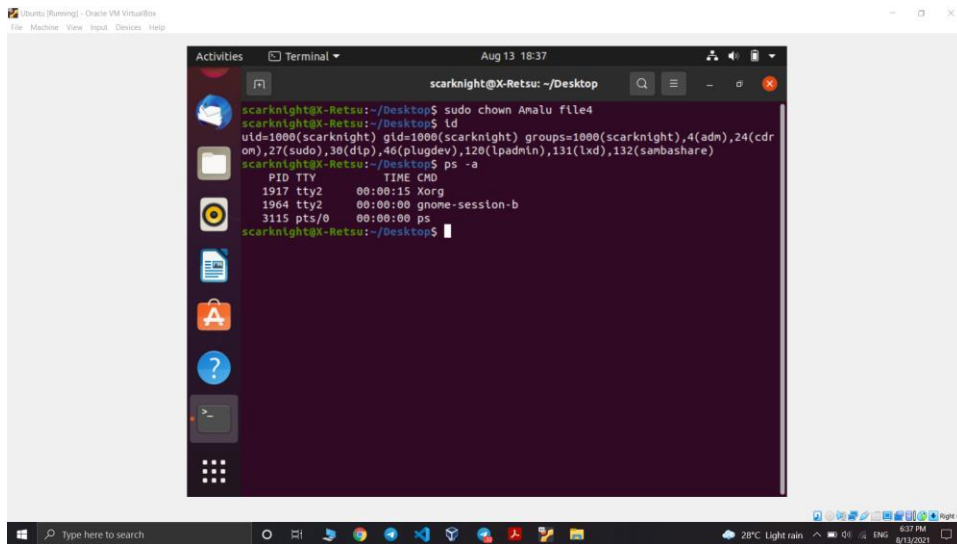
- id command in Linux is used to find out user and group names and numeric ID's (UID or group ID) of the current user.
- #id



9. ps

- The `ps` command, short for Process Status, is a command line utility that is used to display or view information related to the processes running in a Linux system.
- PID – This is the unique process ID
- TTY – This is the type of terminal that the user is logged in to
- TIME – This is the time in minutes and seconds that the process has been running
- CMD – The command that launched the process

#ps -a



10. top

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

#top -u Amalu

