



# UPES

## **\*UNIX AND LINUX** **ESSENTIALS\***

**VIVA**

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**ps** - The ps command enables you to check the status of active processes on a system, as well as display technical information about the processes. This data is useful for administrative tasks such as determining how to set process priorities.

```
root@kali:~# ps
  PID TTY          TIME CMD
 3263 pts/0        00:00:00 bash
 3264 pts/0        00:00:00 ps
```

**pstree** - pstree is a Linux command that shows the running processes as a tree. It is used as a more visual alternative to the ps command. The root of the tree is either init or the process with the given pid. It can also be installed in other Unix systems.

```
root@kali:~# pstree
systemd--ModemManager--2*[{ModemManager}]
        --NetworkManager--2*[{NetworkManager}]
        --VGAuthService
        --accounts-daemon--2*[{accounts-daemon}]
        --colord--2*[{colord}]
        --cron
        --dbus-daemon
        --gdm3--gdm-session-wor--gdm-x-session--Xorg--9*[{Xorg}]
                |               |               |
                |               |               +--gnome-session-b--ssh-agent
                |               |               |               |
                |               |               +--2*[{gdm-x-session}]
                |               |               +--3*[{gnome-+
                |               +--2*[{gdm-session-wor}]
                +--2*[{gdm3}]
        --gnome-keyring-d--3*[{gnome-keyring-d}]
        --haveged
        --packagekitd--2*[{packagekitd}]
        --polkitd--2*[{polkitd}]
        --rsyslogd--3*[{rsyslogd}]
        --rtkit-daemon--2*[{rtkit-daemon}]
        --systemd--(sd-pam)
```

**gzip** - gzip command compresses files. Each single file is compressed into a single file. The compressed file consists of a GNU zip header and deflated data. ... gz" suffix, and deletes the original file.

```
root@kali:~# gzip test.txt
root@kali:~# ls test.*
test.txt.gz
root@kali:~#
```

**zip**- ZIP is a compression and file packaging utility for Unix. Each file is stored in single .zip {zip-filename} file with the extension .zip. ZIP is a compression and file packaging utility for Unix. Each file is stored in single .zip {zip-filename} file with the extension .zip.

```
root@kali:~/Desktop# zip A aass
updating: aass/ (stored 0%)
root@kali:~/Desktop# ls A.*
A.txt  A.zip
root@kali:~/Desktop# S
```

**Unzip** - extract and uncompressing the files

```
root@kali:~/Desktop# unzip A.zip
Archive:  A.zip
root@kali:~/Desktop#
```

**chown** - **chown** command is used to change the file Owner or group. Whenever you want to change ownership, you can use chown command.

**chmod <permission number>** - the chmod command is used to change the access mode of a file. The name is an abbreviation of change mode.

```
root@kali:~/Desktop# sudo chmod 555 A.txt
root@kali:~/Desktop# ls -l A.txt
-r-xr-xr-x 1 root root 331 Oct 24 11:34 A.txt
root@kali:~/Desktop# ls -l
ls: cannot access '-': No such file or directory
ls: cannot access 'l': No such file or directory
root@kali:~/Desktop# ls -l
total 52
-rw-r--r-- 1 root root  5 Oct 22 11:50 1.txt
-rw-r--r-- 1 root root  0 Oct 22 11:49 2.txt
drwxr-xr-x 2 root root 4096 Nov 11 19:47 A
drwxr-xr-x 2 root root 4096 Sep 27 09:15 aass
drwxr-xr-x 2 root root 4096 Sep 27 09:15 asas
-rw-r--r-- 1 root root 1735 Oct  9 08:53 assignment21092020
-rw-r--r-- 1 root root  79 Aug 30 18:44 a.txt
-r-xr-xr-x 1 root root 331 Oct 24 11:34 A.txt
```

**command name >> filename - append data in file**

```
root@kali:~/Desktop# ls >> Data.txt
root@kali:~/Desktop# ls
1.txt 2.txt A aass asas assignment21092020 a.txt A.txt
root@kali:~/Desktop# cat Data.txt
1.txt
2.txt
A
aass
asas
assignment21092020
a.txt
A.txt
ay.txt
Ayush
A.zip
b
b.txt
c.txt
Data.txt
d.txt
e.txt
test
root@kali:~/Desktop#
```

**PS1="Symbol"** - PS1 is a primary prompt variable which holds \u@\h \W\ \\$ special bash characters. This is the default structure of the bash prompt and is displayed every time a user logs in using a terminal. These default values are set in the /etc/bashrc file.

**ssh -V** - Display the version number.

```
root@kali:~/Desktop# ssh -v
usage: ssh [-46AaCfGgKkMNnqsTtVvXxYy] [-B bind_interface]
          [-b bind_address] [-c cipher_spec] [-D [bind_address:]port]
          [-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]
          [-i identity_file] [-J [user@]host[:port]] [-L address]
          [-l login_name] [-m mac_spec] [-O ctl_cmd] [-o option] [-p port]
          [-Q query_option] [-R address] [-S ctl_path] [-W host:port]
          [-w local_tun[:remote_tun]] destination [command]
root@kali:~/Desktop#
```