

Lab 02 Shell Commands

1. Sudo

sudo (SuperUser DO) Linux command allows you to run programs or other commands with administrative privileges, just like "Run as administrator" in Windows.

2. Apt

The apt command is a powerful command-line tool, which works with Ubuntu's Advanced Packaging Tool (APT) performing such functions as installation of new software packages, upgrade of existing software packages, updating of the package list index, and even upgrading the entire Ubuntu system.

Some examples of popular uses for the apt utility:

sudo apt install vlc

```
usman@usman-7G-Series: ~ Q = - □ 🗴

usman~$ sudo apt install vlc
Reading package lists... Done
Building dependency tree
Reading state information... Done
vlc is already the newest version (3.0.9.2-1).
The following packages were automatically installed and are no longer required:
   hplip-data libfprint-2-tod1 libfwupdplugin1 libimagequant0 libllvm10
   python3-olefile python3-pil python3-renderpm python3-reportlab
   python3-reportlab-accel shim
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 20 not upgraded.

usman~$
```



```
Q
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                                                                          usman@usman-7G-Series: ~
usman~$ sudo apt update
Hit:1 http://pk.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://deb.anydesk.com all InRelease
Hit:3 http://ppa.launchpad.net/obsproject/obs-studio/ubuntu focal InRelease
Get:4 http://pk.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:5 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Hit:6 https://dl.google.com/linux/chrome/deb stable InRelease
Hit:7 https://linux.teamviewer.com/deb stable InRelease
Hit:8 http://packages.microsoft.com/repos/code stable InRelease
Ign:9 https://repo.mongodb.org/apt/ubuntu focal/mongodb-org/5.0 InRelease
Hit:10 https://packages.microsoft.com/repos/ms-teams stable InRelease
Get:11 http://pk.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Hit:12 https://repo.mongodb.org/apt/ubuntu focal/mongodb-org/5.0 Release
Hit:13 http://ppa.launchpad.net/umang/indicator-stickynotes/ubuntu focal InRelea
Get:14 http://pk.archive.ubuntu.com/ubuntu focal-updates/main amd64 DEP-11 Metad
ata [278 kB]
Get:16 http://pk.archive.ubuntu.com/ubuntu focal-updates/universe amd64 DEP-11 M
etadata [391 kB]
Get:17 http://pk.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 DEP-11
Metadata [944 B]
Get:18 http://pk.archive.ubuntu.com/ubuntu focal-backports/main amd64 DEP-11 Met
adata [7,964 B]
Get:19 http://pk.archive.ubuntu.com/ubuntu_focal-backports/universe_amd64_DEP-11
```

3. pwd

pwd (print working directory) Ubuntu command displays the full pathname of the current working directory.

4. ls

ls (list) command lists all files and folders in your current working directory. You can also specify paths to other directories if you want to view their contents.

5. mkdir

mkdir (make directory) command allows you to create a new directory.

6. touch

touch is one of the standard Ubuntu Linux commands used to create any kind of file in the current working directory.



7. cd

cd (change directory") Linux command also known as chdir used to change the current working directory. It's one of the most used basic Ubuntu commands. Using this command is easy, just type cd followed by the the folder name. You can use full paths to folders or simply the name of a folder within the directory you are currently working. Some common uses are:

- cd / Takes you to the root directory.
- cd home Open home folder in current directory.
- cd .. Takes you up one directory level.

```
F
                              usman@usman-7G-Series: /
                                                            Q
                                                                           usman~$ pwd
/home/usman
usman~$ cd
                   lib
                          lib64
      cdrom etc
                                                   ргос
                   lib32
                          libx32
                                              opt
usman/$ cd home
usman/home$ ls
ali hadoop hadoop user usman
usman/home$ cd ...
usman/$
```

8. cp

cp (copy) Linux command allows you to copy a file. You should specify both the file you want to be copied and the location you want it copied to – for example, cp xyz /home/usman/pf would copy the file "xyz" to the directory "/home/usman/pf".

9. mv

mv (move) command allows you to move files. The usage is the same as cp – for example mv xyz /home/usman/pf would move the file "xyz" to the directory "/home/usman/pf".

10.rm

rm (remove) command removes the specified file.



11. man

man command displays a "manual page". Manual pages are usually very detailed, and it's recommended that you read the man pages for any command you are unfamiliar with.

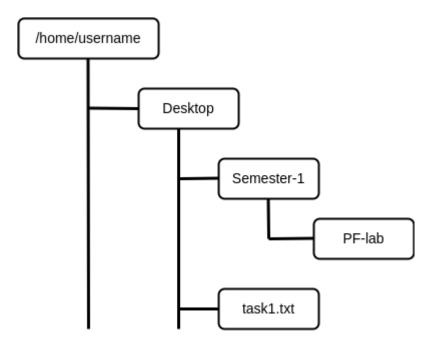
To further ease up your skill, these Ubuntu Terminal keyboard shortcuts would help.

Ubuntu Terminal Shortcuts	Function
Ctrl + Alt + T	Open new terminal
Ctrl + A	Move cursor to beginning of line
Ctrl + E	Move cursor to end of line
Ctrl + U	Clears the entire current line
Ctrl + L	Clears the terminal output
Up/Down Arrow keys	To scroll through your command history, allowing you to quickly execute the same command multiple times



Practice

Create the following hierarchy using commands as shown below:



After creating the above hierarchy do the following:

- 1. Now copy the task1.txt from Desktop to PF-lab Directory.
- 2. Create a copy of this task1.txt with name task1-1.txt in PF-lab Directory
- 3. Now move task1-1.txt to Desktop
- 4. Delete task1-1.txt from Desktop
- 5. Change path to home directory