

A. MANAGING DIRECTORIES

1. Change the current directory to /home/<user>

`cd /home/student`

```
student@student-VirtualBox:~$ cd /home/student
student@student-VirtualBox:~$
```

2. Create a directory called systems

`mkdir systems`

```
├── systems
├── Templates
└── Videos

20 directories, 2 files
student@student-VirtualBox:~$ mkdir systems
```

3. Create a directory called exercises. Go to this directory to create another new directory called programming.

```
student@student-VirtualBox:~$ mkdir exercises
```

```
student@student-VirtualBox:~$ mkdir exercises/programming
student@student-VirtualBox:~$ tree
```

```
├── exercises
│   └── programming
├── Music
├── Pictures
└── Public
```

4. Go back to the user's home directory. Delete the directories "exercises" and programming using just one command. Create the directories again with one command.

To delete the directories with just one command we can use `rm -rf exercises`, this command delete the directory and all its content.

```
student@student-VirtualBox:~$ rm -rf exercises
student@student-VirtualBox:~$ tree
.
├── Desktop
├── Documents
├── Downloads
├── Music
├── Pictures
├── Public
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18
├── systems
├── Templates
└── Videos
```

To create several directories at the same time we can use the command *mkdir -p*.

```
student@student-VirtualBox:~$ mkdir -p exercises/programming
student@student-VirtualBox:~$ tree
.
├── Desktop
├── Documents
├── Downloads
├── exercises
│   └── programming
├── systems
├── Templates
└── Videos
```

5. Print the contents of the root directory.

```
student@student-VirtualBox:~$ ls /
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  run  snap  sys  usr
boot  dev  home  lib32  libx32  media  opt  root  sbin  srv  tmp  var
student@student-VirtualBox:~$
```

6. Print all the files and directories that begin with d in the /usr/bin directory.

```
student@student-VirtualBox:~$ ls /usr/bin/d*
/usr/bin/dash
/usr/bin/date
/usr/bin/dbus-cleanup-sockets
/usr/bin/dbus-daemon
/usr/bin/dbus-launch
/usr/bin/dbus-monitor
/usr/bin/dbus-run-session
/usr/bin/dbus-send
/usr/bin/dbus-update-activation-environment
/usr/bin/dbus-uuidgen
/usr/bin/dc
/usr/bin/dconf
/usr/bin/dd
/usr/bin/ddstddecode
/usr/bin/deallocvt
/usr/bin/debconf
/usr/bin/debconf-apt-progress
/usr/bin/debconf-communicate
/usr/bin/debconf-copydb
/usr/bin/debconf-escape
/usr/bin/debconf-set-selections
/usr/bin/debconf-show
/usr/bin/deb-systemd-helper
/usr/bin/deb-systemd-invoke
/usr/bin/deja-dup
/usr/bin/delpart
/usr/bin/delv
/usr/bin/desktop-file-edit
/usr/bin/desktop-file-install
/usr/bin/desktop-file-validate
/usr/bin/devdump
/usr/bin/df
/usr/bin/dfu-tool
/usr/bin/dh_bash-completion
/usr/bin/dh_installxmlcatalogs
/usr/bin/dh_perl_openssl
/usr/bin/diff
/usr/bin/diff3
/usr/bin/dig
/usr/bin/dir
/usr/bin/dircolors
/usr/bin/dirmngr
/usr/bin/dirmngr-client
/usr/bin/dirname
/usr/bin/dirsplit
/usr/bin/dmesg
/usr/bin/dnsdomainname
/usr/bin/domainname
/usr/bin/do-release-upgrade
/usr/bin/dpkg
/usr/bin/dpkg-deb
/usr/bin/dpkg-divert
/usr/bin/dpkg-maintscript-helper
/usr/bin/dpkg-query
/usr/bin/dpkg-split
/usr/bin/dpkg-statoverride
/usr/bin/dpkg-trigger
/usr/bin/driverless
/usr/bin/du
/usr/bin/dumpkeys
/usr/bin/duplicity
/usr/bin/dvipdf
```

7. List all the files and directories in /etc, including subdirectories.

```
student@student-VirtualBox:~$ ls -la /etc
.
..
acpi
adduser.conf
alsa
alternatives
anacrontab
apg.conf
apm
apparmor
apparmor.d
appport
appstream.conf
apt
avahi
fstab
fuse.conf
fwupd
gai.conf
gamemode.ini
gdb
gdm3
geoclue
ghostscript
glvnd
gnome
groff
group
group-
grub.d
logrotate.d
lsb-release
ltrace.conf
machine-id
magic
magic.mime
mailcap
mailcap.order
manpath.config
mime.types
mke2fs.conf
modprobe.d
modules
modules-load.d
ntab
resolv.conf
rmt
rpc
rsyslog.conf
rsyslog.d
rygel.conf
sane.d
security
selinux
sensors3.conf
sensors.d
services
sgml
shadow
shadow-
```

8. Create the empty files called student.txt, student1.txt, student2.txt, list, luggage and last in the directory named “systems”.

```
student@student-VirtualBox:~$ mkdir -p systems/{student.txt,student1.txt,student2.txt,list,luggage,la
st}
student@student-VirtualBox:~$ tree
.
├── Desktop
├── Documents
├── Downloads
├── exercises
│   └── programming
├── Music
├── Pictures
├── Public
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18
└── systems
    ├── last
    ├── list
    ├── luggage
    ├── student1.txt
    ├── student2.txt
    └── student.txt
```

9. Print all the files that begin with “l” in the directory systems.

```
student@student-VirtualBox:~$ ls systems/l*
systems/last:

systems/list:

systems/luggage:
```

10. Print all the files that end with “txt” in the directory systems.

```
student@student-VirtualBox:~$ ls systems/*.txt
systems/student1.txt:

systems/student2.txt:

systems/student.txt:
```

11. Create a new directory into \$HOME called “config”.

```
student@student-VirtualBox:/home$ mkdir $HOME/config
student@student-VirtualBox:/home$ ls
lost+found student
student@student-VirtualBox:/home$ ls
lost+found student
student@student-VirtualBox:/home$ cd ..
student@student-VirtualBox/$ ls
bin boot cdrom dev etc home lib lib32 lib64 libx32 lost+found media mnt opt proc root run sbin snap srv sys usr var
student@student-VirtualBox/$ cd $HOME
student@student-VirtualBox:~$ LS
LS: command not found
student@student-VirtualBox:~$ ls
config Desktop Documents Downloads exercises Music Pictures Public snap systems Templates Videos
```

12. Copy all the files in /etc which begin with “a” into config.

```
student@student-VirtualBox:/$ cd $HOME
student@student-VirtualBox:~$ LS
LS: command not found
student@student-VirtualBox:~$ ls
config Desktop Documents Downloads exercises Music Pictures Public snap systems Templates Videos
student@student-VirtualBox:~$ cp /etc/a* $HOME/config
cp: -r not specified; omitting directory '/etc/acpi'
cp: -r not specified; omitting directory '/etc/alsa'
cp: -r not specified; omitting directory '/etc/alternatives'
cp: -r not specified; omitting directory '/etc/apm'
cp: -r not specified; omitting directory '/etc/apparmor'
cp: -r not specified; omitting directory '/etc/apparmor.d'
cp: -r not specified; omitting directory '/etc/appport'
cp: -r not specified; omitting directory '/etc/apt'
cp: -r not specified; omitting directory '/etc/avahi'
student@student-VirtualBox:~$
```

13. Delete all the files in “config” which ends with “conf”

```
student@student-VirtualBox:~$ rm $HOME/config/*conf
student@student-VirtualBox:~$
```