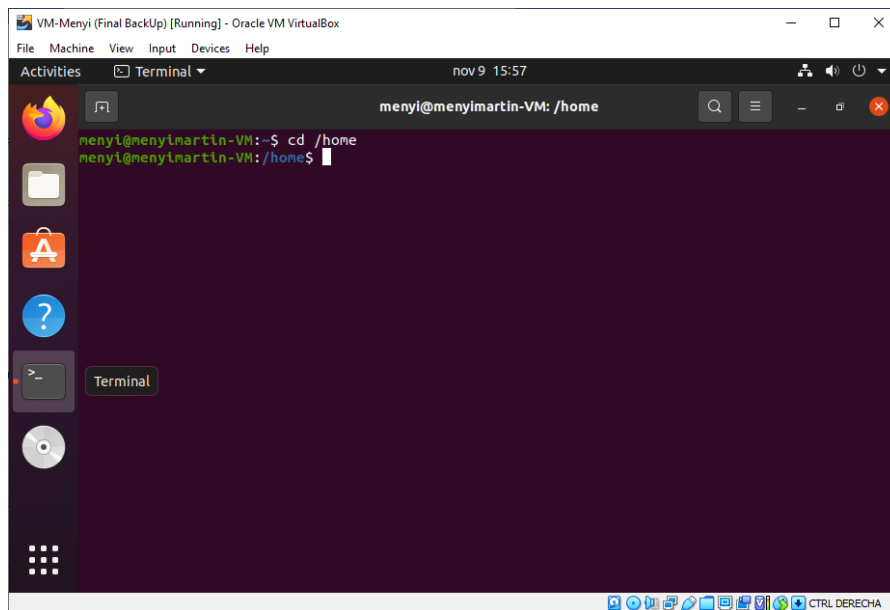


03: Linux systems administration # Exercises

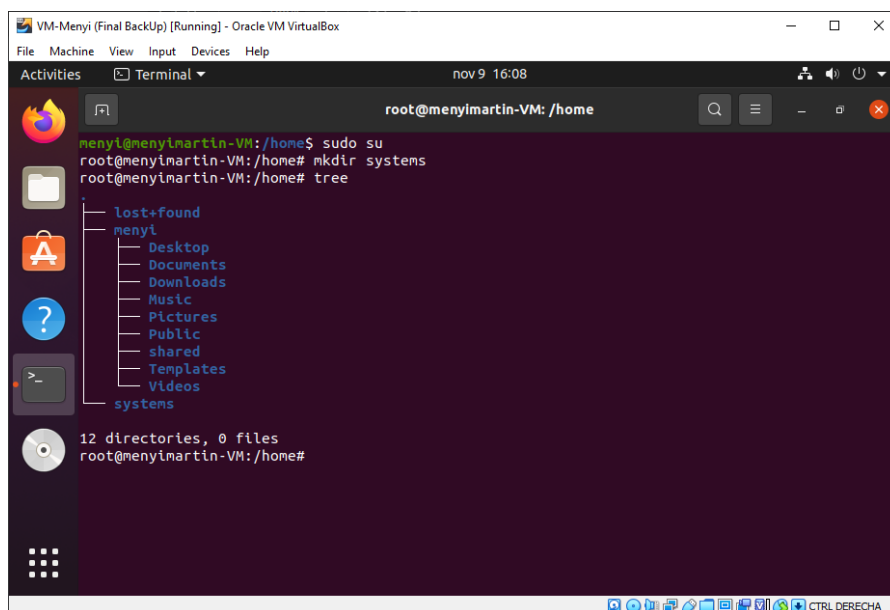
A. MANAGING DIRECTORIES

1. Change the current directory to /home/



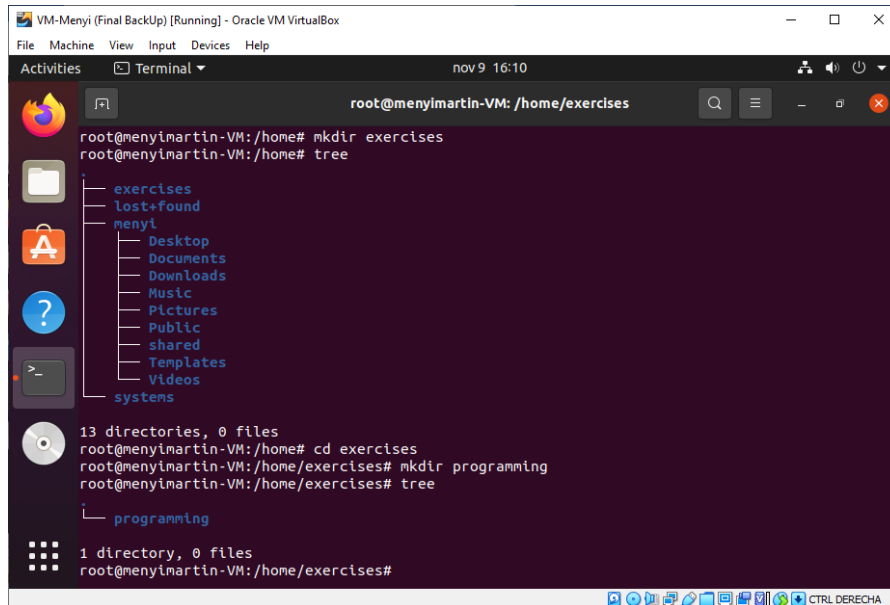
The screenshot shows a terminal window titled "VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox". The terminal prompt is "menyi@menyimartin-VM: /home". The user has entered the command "cd /home" and the prompt has changed to "menyi@menyimartin-VM: /home\$". The terminal window is part of a desktop environment with a sidebar on the left containing icons for Activities, Files, Applications, and a search bar. The top of the window shows the date and time as "nov 9 15:57".

2. Create a directory called systems



The screenshot shows a terminal window titled "VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox". The terminal prompt is "root@menyimartin-VM: /home". The user has entered the command "mkdir systems" and the prompt has changed to "root@menyimartin-VM: /home#". The user has also entered the command "tree" and the output shows a directory tree structure. The terminal window is part of a desktop environment with a sidebar on the left containing icons for Activities, Files, Applications, and a search bar. The top of the window shows the date and time as "nov 9 16:08".

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



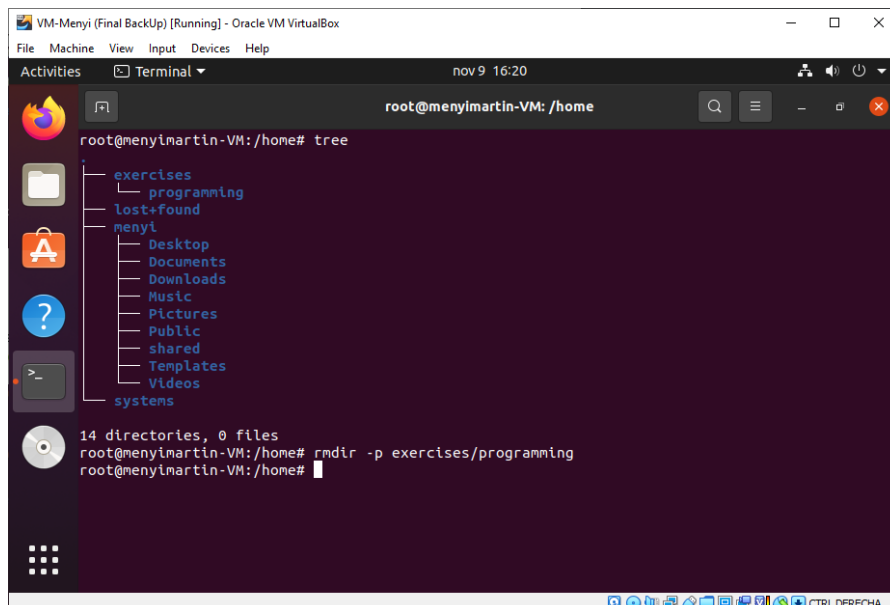
```
VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 9 16:10
root@menyimartin-VM: /home/exercises

root@menyimartin-VM:/home# mkdir exercises
root@menyimartin-VM:/home# tree
.
├── exercises
├── lost+found
├── menyi
│   ├── Desktop
│   ├── Documents
│   ├── Downloads
│   ├── Music
│   ├── Pictures
│   ├── Public
│   ├── shared
│   ├── Templates
│   └── Videos
└── systems

13 directories, 0 files
root@menyimartin-VM:/home# cd exercises
root@menyimartin-VM:/home/exercises# mkdir programming
root@menyimartin-VM:/home/exercises# tree
.
└── programming

1 directory, 0 files
root@menyimartin-VM:/home/exercises#
```

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

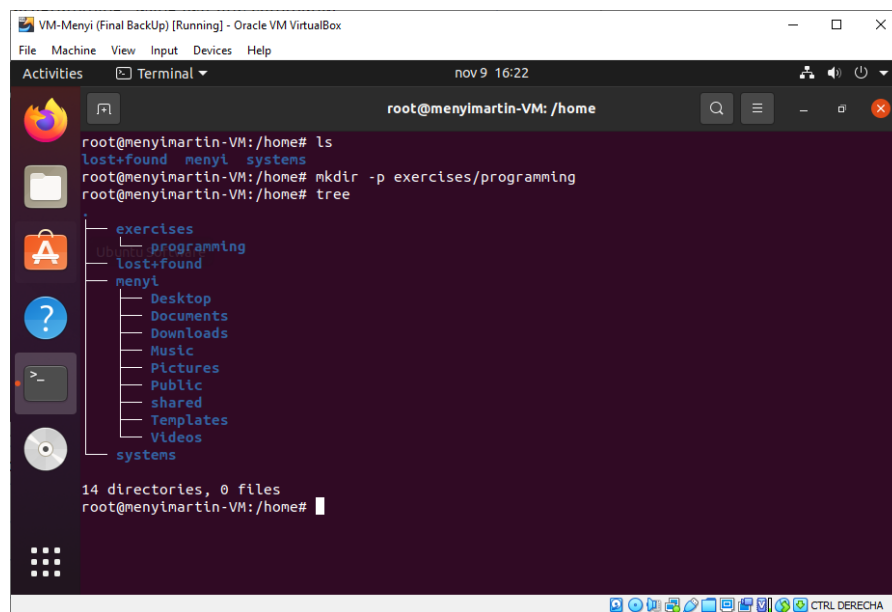


```
VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 9 16:20
root@menyimartin-VM: /home

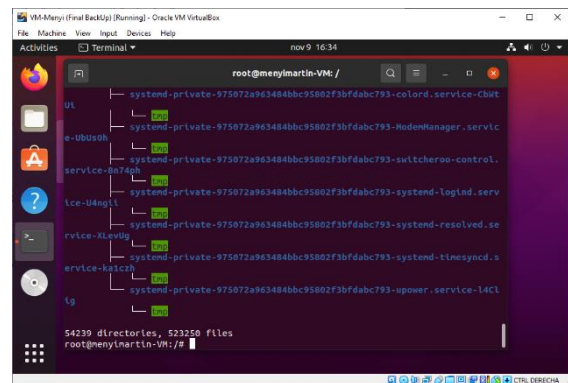
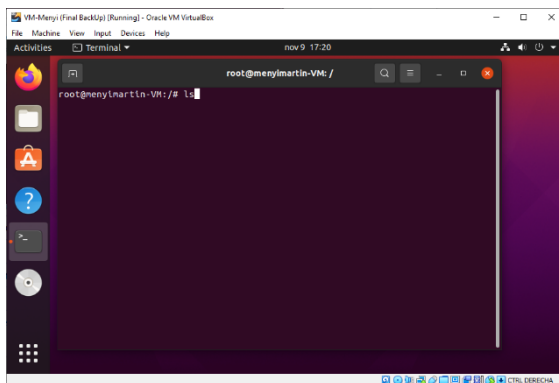
root@menyimartin-VM:/home# tree
.
├── exercises
│   └── programming
├── lost+found
├── menyi
│   ├── Desktop
│   ├── Documents
│   ├── Downloads
│   ├── Music
│   ├── Pictures
│   ├── Public
│   ├── shared
│   ├── Templates
│   └── Videos
└── systems

14 directories, 0 files
root@menyimartin-VM:/home# rmdir -p exercises/programming
root@menyimartin-VM:/home#
```

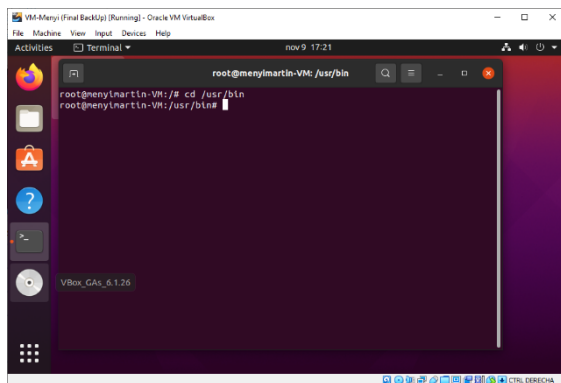
- ❖ Create the directories again with one command.



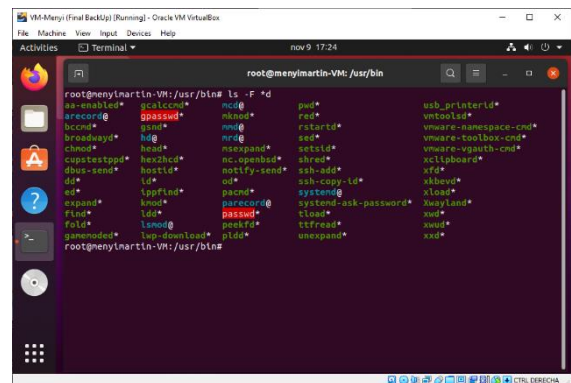
5. Print the contents of the root directory



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

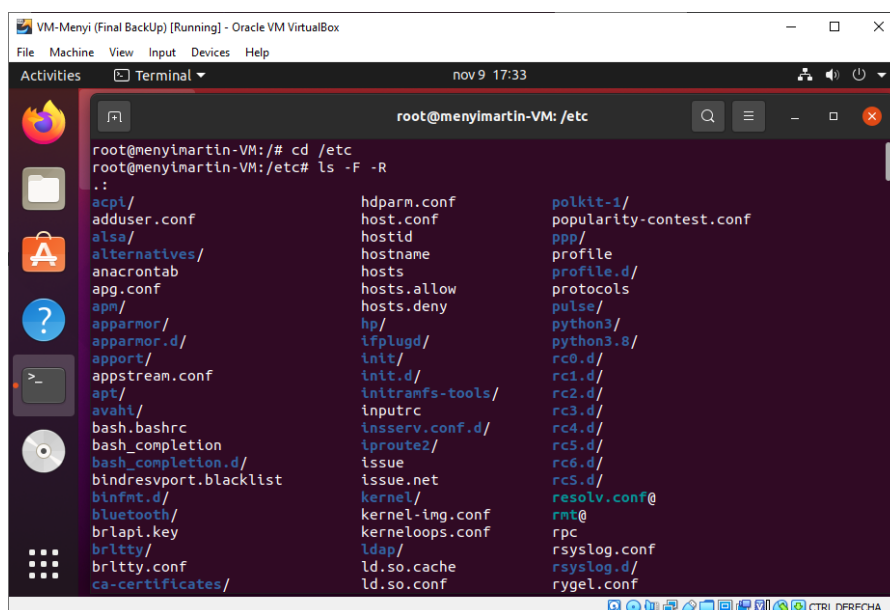


```
root@menymartin-VM: /usr/bin
root@menymartin-VM: /usr/bin# ls -F
```



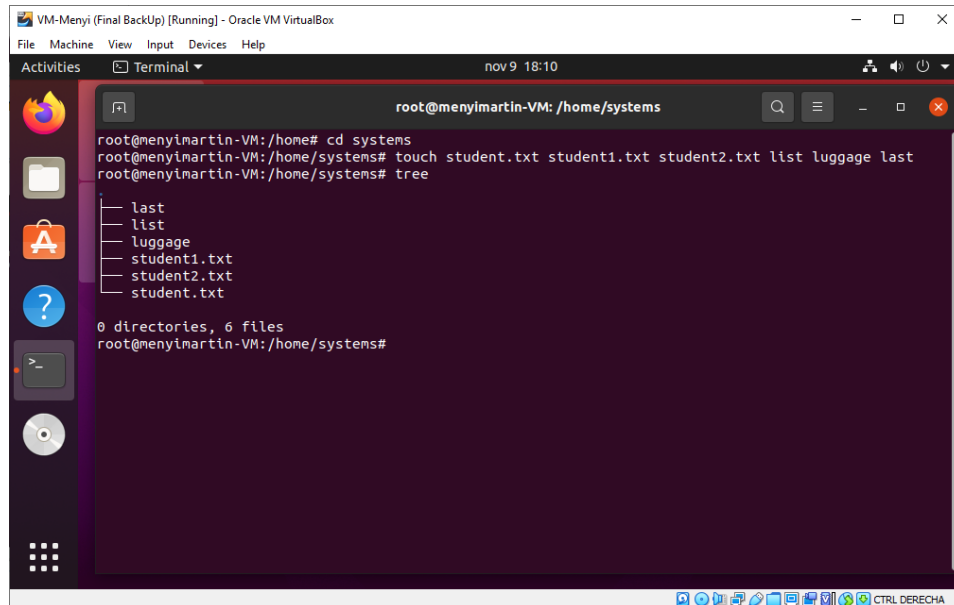
```
root@menymartin-VM: /usr/bin# ls -F *d
aa-enabled* gccld* hdd* pld* usb_printerId*
arecord* gssd* mouse* rdt* vmtools*
bccnd* gssd* nmd* rstartd* vmware-namespaces-cnd*
broadwayd* hdd* nmd* sdd* vmware-toolbox-cnd*
chm* hdd* nmd* sdd* vmware-usb-cnd*
cupstestppd* hex2hdd* nc.openbsd* shred* xclipboard*
dbus-send* hostid* notiffy-send* ssh-add* xfd*
d* ld* o* ssh-copy-id* xlib*
ed* lppfind* pacnd* system* xload*
expand* knod* paracore* system-ask-password* xwayland*
fluc* ldd* paswd* tload* xut*
fold* lsmod* peekd* ttfread* xwd*
gammodd* tlp-download* pldd* unexpand* xxd*
```

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



```
root@menymartin-VM: /etc
root@menymartin-VM: /etc# ls -F -R
.:
acpi/ hdparm.conf polkit-1/
adduser.conf host.conf popularity-contest.conf
alsa/ hostid ppp/
alternatives/ hostname profile
anacrontab hosts profile.d
apg.conf hosts.allow protocols
apm/ hosts.deny pulse/
apparmor/ hp/ python3/
apparmor.d/ ifplugd/ python3.8/
appport/ init/ rc0.d/
appstream.conf init.d/ rc1.d/
apt/ initramfs-tools/ rc2.d/
avahi/ inputrc rc3.d/
bash.bashrc inserv.conf.d/ rc4.d/
bash_completion iproute2/ rc5.d/
bash_completion.d/ issue rc6.d/
bindresvport.blacklist issue.net rcS.d/
binfmt.d/ kernel/ resolv.conf@
bluetooth/ kernel-img.conf rmt@
brlapi.key kernelloops.conf rpc
brltty/ ldap/ rsyslog.conf
brltty.conf ld.so.cache rsyslog.d/
ca-certificates/ ld.so.conf rygel.conf
```

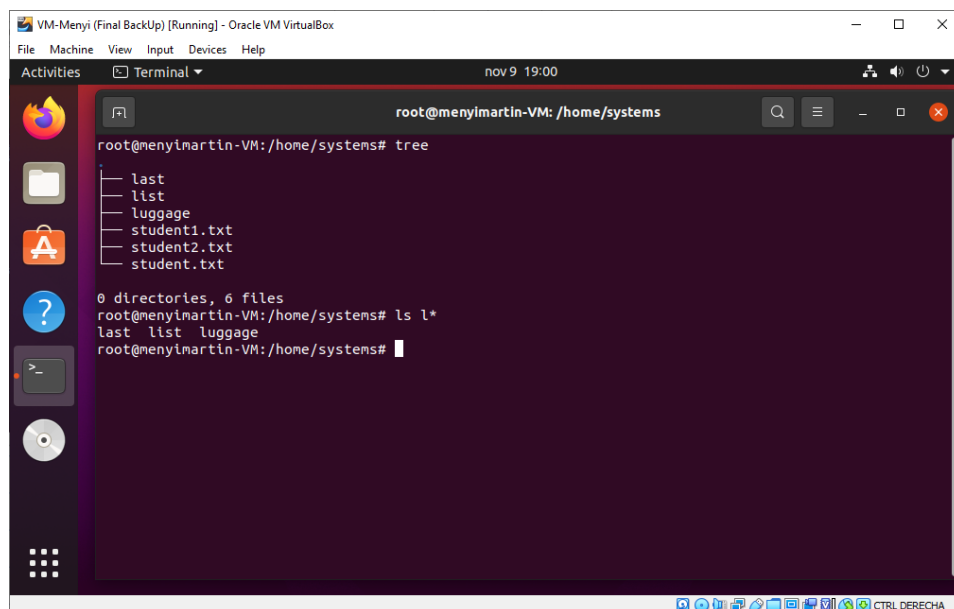
8. Create the empty files student.txt, student1.txt, student2.txt, list, luggage and last inside systems



```
VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 9 18:10
root@menyimartin-VM: /home/systems
root@menyimartin-VM:/home# cd systems
root@menyimartin-VM:/home/systems# touch student.txt student1.txt student2.txt list luggage last
root@menyimartin-VM:/home/systems# tree
.
├── last
├── list
├── luggage
├── student1.txt
├── student2.txt
└── student.txt

0 directories, 6 files
root@menyimartin-VM:/home/systems#
```

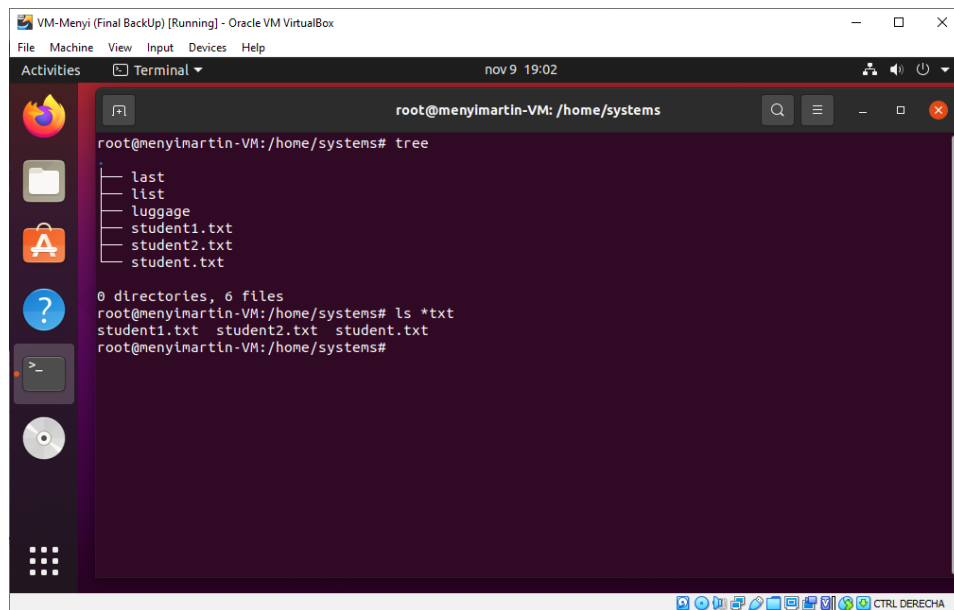
9. Print all the files that begin with "l" in the directory "systems"



```
VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 9 19:00
root@menyimartin-VM: /home/systems
root@menyimartin-VM:/home/systems# tree
.
├── last
├── list
├── luggage
├── student1.txt
├── student2.txt
└── student.txt

0 directories, 6 files
root@menyimartin-VM:/home/systems# ls l*
last list luggage
root@menyimartin-VM:/home/systems#
```

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

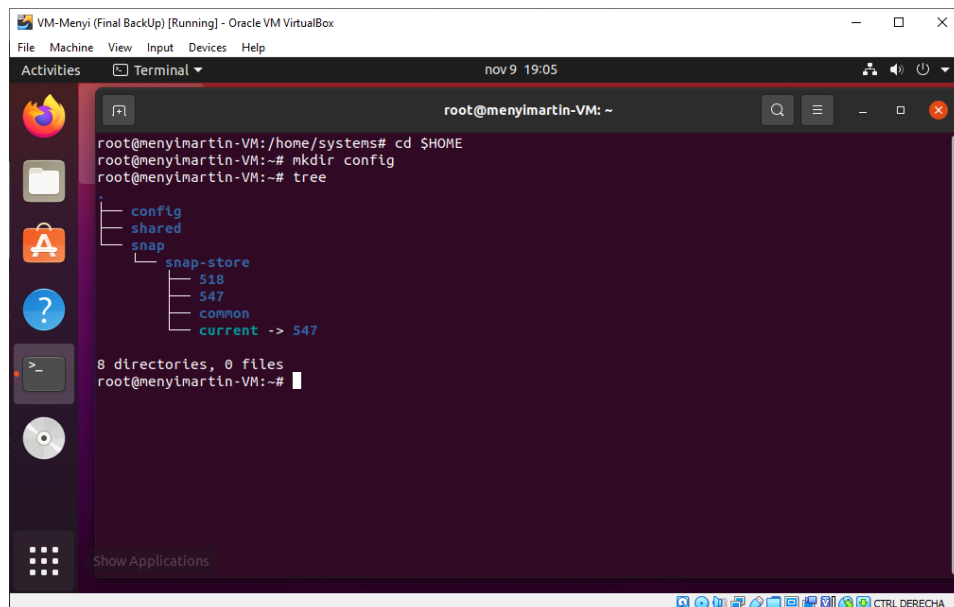


The screenshot shows a terminal window titled "VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox". The terminal is running as root in the /home/systems directory. The user has executed the 'tree' command, which shows a directory structure with files 'last', 'list', 'luggage', 'student1.txt', 'student2.txt', and 'student.txt'. Then, the user has executed 'ls *txt', which lists 'student1.txt', 'student2.txt', and 'student.txt'.

```
root@menyimartin-VM: /home/systems# tree
.
├── last
├── list
├── luggage
├── student1.txt
├── student2.txt
└── student.txt

0 directories, 6 files
root@menyimartin-VM: /home/systems# ls *txt
student1.txt  student2.txt  student.txt
root@menyimartin-VM: /home/systems#
```

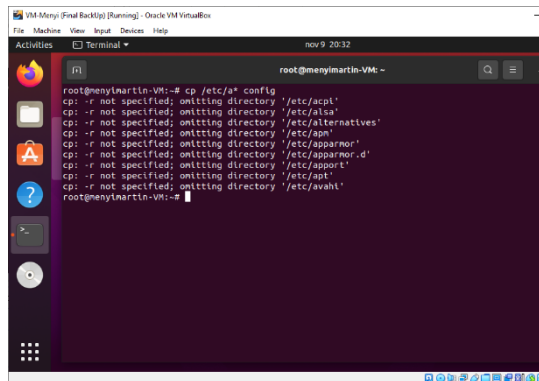
11. Create a new directory into \$HOME called “config”



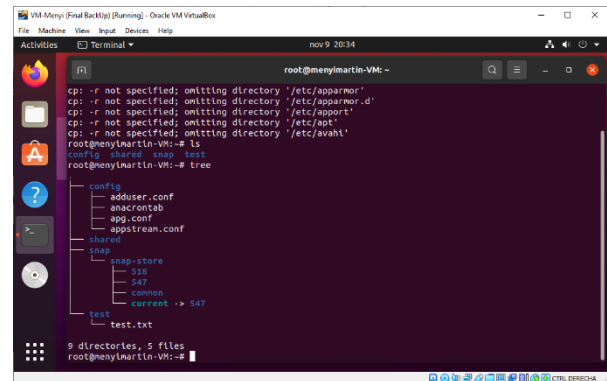
The screenshot shows a terminal window titled "VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox". The terminal is running as root in the /home/systems directory. The user has executed 'cd \$HOME' to move to the home directory. Then, the user has executed 'mkdir config' to create a new directory named 'config'. Finally, the user has executed 'tree', which shows the directory structure including 'config', 'shared', 'snap', and 'snap-store'.

```
root@menyimartin-VM: /home/systems# cd $HOME
root@menyimartin-VM: ~# mkdir config
root@menyimartin-VM: ~# tree
.
├── config
├── shared
├── snap
│   └── snap-store
│       ├── 518
│       ├── 547
│       ├── common
│       └── current -> 547
└── 8 directories, 0 files
root@menyimartin-VM: ~#
```

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



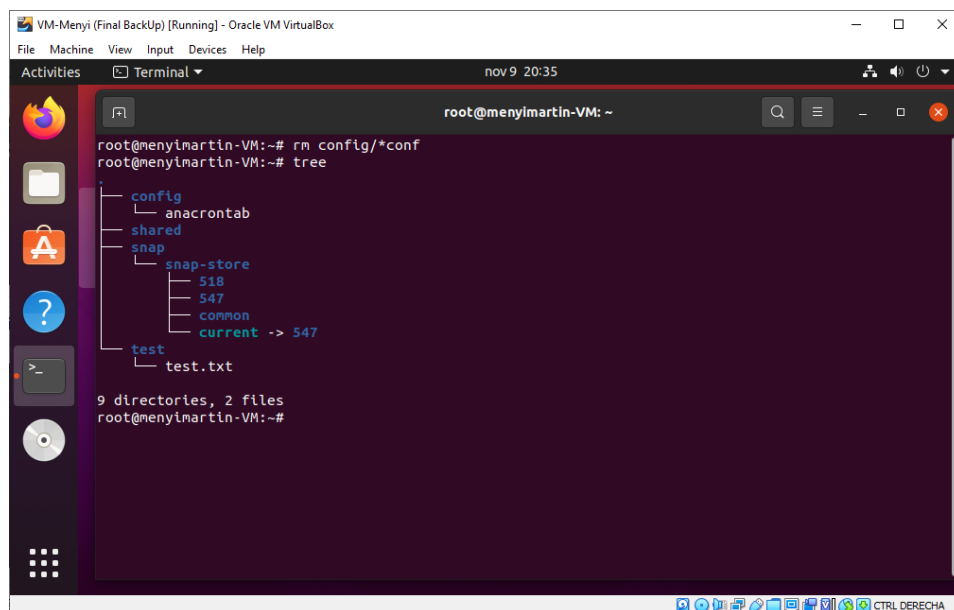
```
root@menyimartin-VM:~# cp /etc/a* config
cp: -r not specified; omitting directory '/etc/acpi'
cp: -r not specified; omitting directory '/etc/alsa'
cp: -r not specified; omitting directory '/etc/alternatives'
cp: -r not specified; omitting directory '/etc/apt'
cp: -r not specified; omitting directory '/etc/apparmor'
cp: -r not specified; omitting directory '/etc/apparmor.d'
cp: -r not specified; omitting directory '/etc/aspport'
cp: -r not specified; omitting directory '/etc/apt'
cp: -r not specified; omitting directory '/etc/avahi'
root@menyimartin-VM:~#
```



```
root@menyimartin-VM:~# ls
config shared snap test
root@menyimartin-VM:~# tree
.
├── config
│   ├── address.conf
│   ├── anacrontab
│   ├── app.conf
│   └── appstream.conf
├── shared
├── snap
│   ├── snap-store
│   │   ├── 518
│   │   ├── 547
│   │   ├── common
│   │   └── current -> 547
└── test
    └── test.txt

9 directories, 5 files
root@menyimartin-VM:~#
```

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



```
root@menyimartin-VM:~# rm config/*conf
root@menyimartin-VM:~# tree
.
├── config
│   ├── anacrontab
├── shared
├── snap
│   ├── snap-store
│   │   ├── 518
│   │   ├── 547
│   │   ├── common
│   │   └── current -> 547
└── test
    └── test.txt

9 directories, 2 files
root@menyimartin-VM:~#
```