CHECK
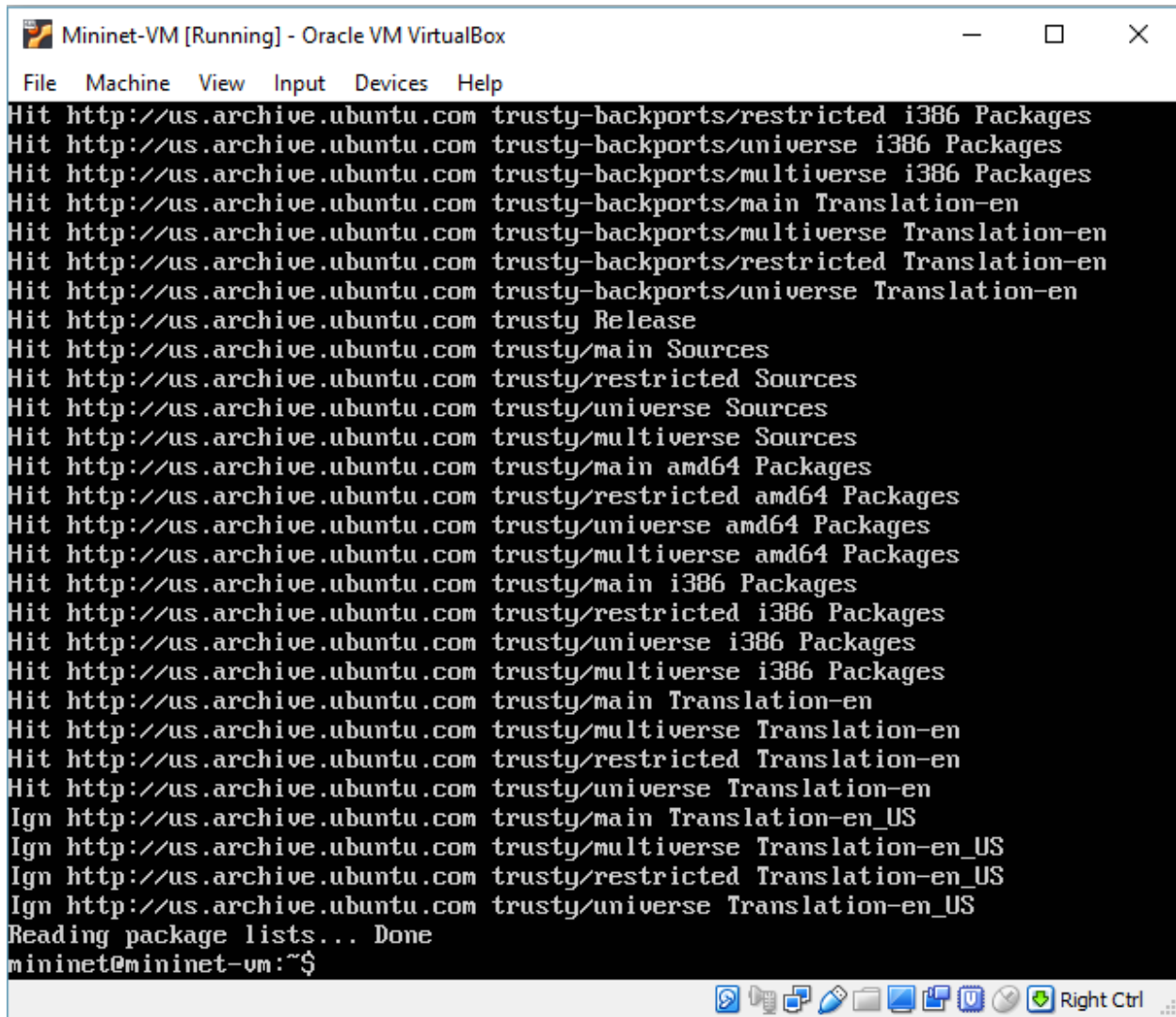
1. Ketik $ ssh –y –l mininet –p 2222 localhost

```
mininet@mininet-vm:~$ ssh -y -l mininet -p 2222 localhost
mininet@mininet-vm:~$ wireshark &
[1] 1399
mininet@mininet-vm:~$
(wireshark:1399): Gtk-WARNING **: cannot open display:
```
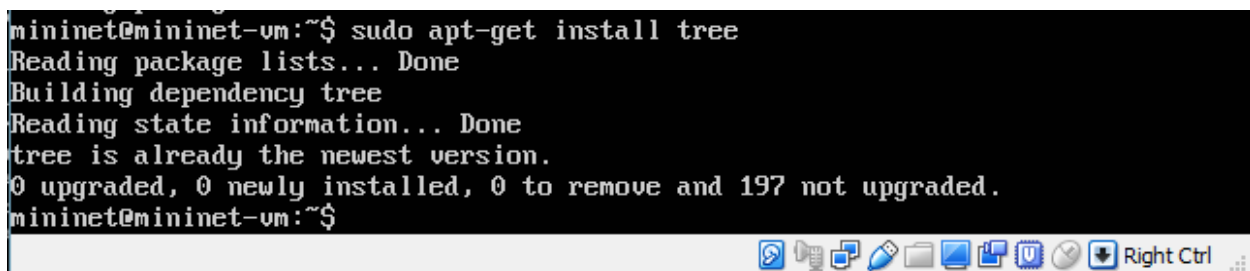
2. Ketik mininet@mininet-vm:~$ sudo apt-get update

```
Mininet-VM [Running] - Oracle VM VirtualBox                    —    □    ×
File   Machine   View   Input   Devices   Help
New release '16.04.4 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

mininet@mininet-vm:~$ sudo apt-get update
Ign http://us.archive.ubuntu.com trusty InRelease
Hit http://security.ubuntu.com trusty-security InRelease
Hit http://us.archive.ubuntu.com trusty-updates InRelease
Hit http://security.ubuntu.com trusty-security/main Sources
Hit http://us.archive.ubuntu.com trusty-backports InRelease
Hit http://security.ubuntu.com trusty-security/restricted Sources
Hit http://us.archive.ubuntu.com trusty Release.gpg
Hit http://security.ubuntu.com trusty-security/universe Sources
Hit http://us.archive.ubuntu.com trusty-updates/main Sources
Hit http://security.ubuntu.com trusty-security/multiverse Sources
Hit http://us.archive.ubuntu.com trusty-updates/restricted Sources
Hit http://security.ubuntu.com trusty-security/main amd64 Packages
Hit http://us.archive.ubuntu.com trusty-updates/universe Sources
Hit http://security.ubuntu.com trusty-security/restricted amd64 Packages
Hit http://us.archive.ubuntu.com trusty-updates/multiverse Sources
Hit http://us.archive.ubuntu.com trusty-updates/main amd64 Packages
Hit http://security.ubuntu.com trusty-security/universe amd64 Packages
Hit http://security.ubuntu.com trusty-security/multiverse amd64 Packages
Hit http://security.ubuntu.com trusty-security/main i386 Packages
Hit http://us.archive.ubuntu.com trusty-updates/restricted amd64 Packages
Hit http://us.archive.ubuntu.com trusty-updates/universe amd64 Packages
Hit http://security.ubuntu.com trusty-security/restricted i386 Packages
Hit http://security.ubuntu.com trusty-security/universe i386 Packages
Hit http://us.archive.ubuntu.com trusty-updates/multiverse amd64 Packages
Hit http://security.ubuntu.com trusty-security/multiverse i386 Packages
100% [Waiting for headers] [Waiting for headers]           1,408 kB/s 0s
```

Mininet-VM [Running] - Oracle VM VirtualBox

File   Machine   View   Input   Devices   Help

```
Hit http://us.archive.ubuntu.com trusty-backports/restricted i386 Packages
Hit http://us.archive.ubuntu.com trusty-backports/universe i386 Packages
Hit http://us.archive.ubuntu.com trusty-backports/multiverse i386 Packages
Hit http://us.archive.ubuntu.com trusty-backports/main Translation-en
Hit http://us.archive.ubuntu.com trusty-backports/multiverse Translation-en
Hit http://us.archive.ubuntu.com trusty-backports/restricted Translation-en
Hit http://us.archive.ubuntu.com trusty-backports/universe Translation-en
Hit http://us.archive.ubuntu.com trusty Release
Hit http://us.archive.ubuntu.com trusty/main Sources
Hit http://us.archive.ubuntu.com trusty/restricted Sources
Hit http://us.archive.ubuntu.com trusty/universe Sources
Hit http://us.archive.ubuntu.com trusty/multiverse Sources
Hit http://us.archive.ubuntu.com trusty/main amd64 Packages
Hit http://us.archive.ubuntu.com trusty/restricted amd64 Packages
Hit http://us.archive.ubuntu.com trusty/universe amd64 Packages
Hit http://us.archive.ubuntu.com trusty/multiverse amd64 Packages
Hit http://us.archive.ubuntu.com trusty/main i386 Packages
Hit http://us.archive.ubuntu.com trusty/restricted i386 Packages
Hit http://us.archive.ubuntu.com trusty/universe i386 Packages
Hit http://us.archive.ubuntu.com trusty/multiverse i386 Packages
Hit http://us.archive.ubuntu.com trusty/main Translation-en
Hit http://us.archive.ubuntu.com trusty/multiverse Translation-en
Hit http://us.archive.ubuntu.com trusty/restricted Translation-en
Hit http://us.archive.ubuntu.com trusty/universe Translation-en
Ign http://us.archive.ubuntu.com trusty/main Translation-en_US
Ign http://us.archive.ubuntu.com trusty/multiverse Translation-en_US
Ign http://us.archive.ubuntu.com trusty/restricted Translation-en_US
Ign http://us.archive.ubuntu.com trusty/universe Translation-en_US
Reading package lists... Done
mininet@mininet-vm:~$
```

Right Ctrl

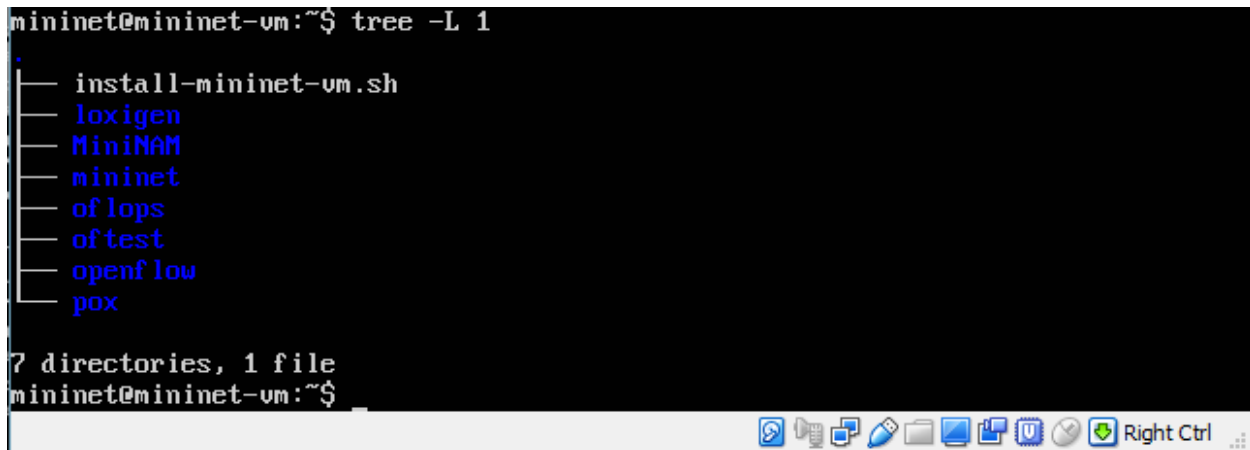3.   Ketik mininet@mininet-vm:~ $ sudo apt-get install tree


```
mininet@mininet-vm:~$ sudo apt-get install tree
Reading package lists... Done
Building dependency tree
Reading state information... Done
tree is already the newest version.
0 upgraded, 0 newly installed, 0 to remove and 197 not upgraded.
mininet@mininet-vm:~$
```

Right Ctrl

4. mininet@mininet-vm:~$ tree –L 1

```
mininet@mininet-vm:~$ tree -L 1
.
├── install-mininet-vm.sh
├── loxigen
├── MiniNAM
├── mininet
├── oflops
├── oftest
├── openflow
└── pox

7 directories, 1 file
mininet@mininet-vm:~$
```
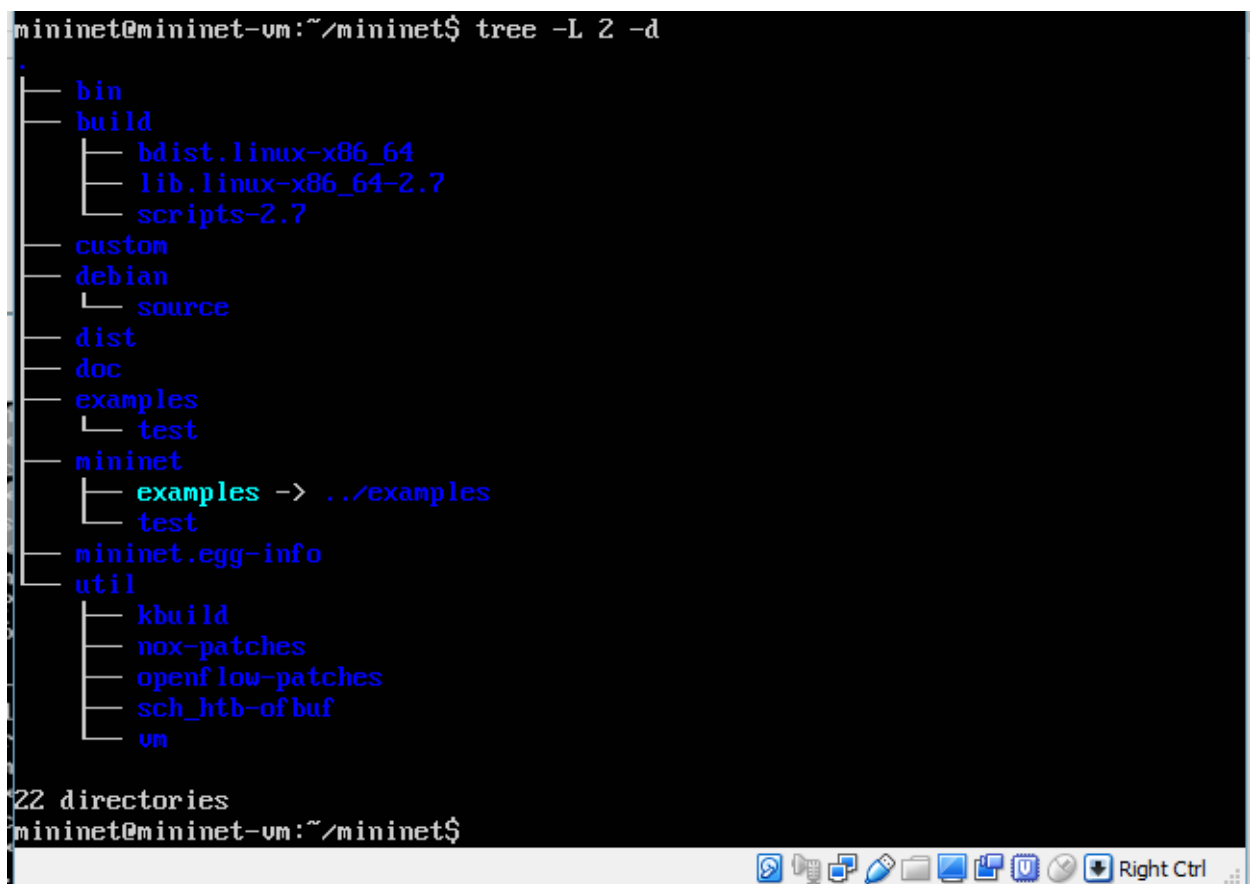
5. mininet@mininet-vm:~/mininet$ tree –L 2 -d

```
mininet@mininet-vm:~/mininet$ tree -L 2 -d
.
├── bin
├── build
│   ├── bdist.linux-x86_64
│   ├── lib.linux-x86_64-2.7
│   └── scripts-2.7
├── custom
├── debian
│   └── source
├── dist
├── doc
├── examples
│   └── test
├── mininet
│   ├── examples -> ../examples
│   └── test
├── mininet.egg-info
└── util
    ├── kbuild
    ├── nox-patches
    ├── openflow-patches
    ├── sch_htb-ofbuf
    └── vm

22 directories
mininet@mininet-vm:~/mininet$
```

6. mininet@mininet-vm:~/mininet/examples$ ll

```
-rwxrwxr-x  1 mininet mininet    4967 Mar 21  2017 controlnet.py*
-rwxrwxr-x  1 mininet mininet    3725 Mar 21  2017 cpu.py*
-rwxrwxr-x  1 mininet mininet     960 Mar 21  2017 emptynet.py*
-rwxrwxr-x  1 mininet mininet    1549 Mar 21  2017 hwintf.py*
-rw-rw-r--  1 mininet mininet      48 Mar 21  2017 __init__.py
-rwxrwxr-x  1 mininet mininet    1320 Mar 21  2017 intfoptions.py*
-rwxrwxr-x  1 mininet mininet    2034 Mar 21  2017 limit.py*
-rwxrwxr-x  1 mininet mininet    4062 Mar 21  2017 linearbandwidth.py*
-rwxrwxr-x  1 mininet mininet    2826 Mar 21  2017 linuxrouter.py*
-rwxrwxr-x  1 mininet mininet  154479 Mar 21  2017 miniedit.py*
-rwxrwxr-x  1 mininet mininet    4198 Mar 21  2017 mobility.py*
-rwxrwxr-x  1 mininet mininet     834 Mar 21  2017 multilink.py*
-rwxrwxr-x  1 mininet mininet    2235 Mar 21  2017 multiping.py*
-rwxrwxr-x  1 mininet mininet    2469 Mar 21  2017 multipoll.py*
-rwxrwxr-x  1 mininet mininet    1049 Mar 21  2017 multitest.py*
-rwxrwxr-x  1 mininet mininet    1948 Mar 21  2017 natnet.py*
-rwxrwxr-x  1 mininet mininet     550 Mar 21  2017 nat.py*
-rwxrwxr-x  1 mininet mininet    2330 Mar 21  2017 numberedports.py*
-rwxrwxr-x  1 mininet mininet     932 Mar 21  2017 popenpoll.py*
-rwxrwxr-x  1 mininet mininet    1023 Mar 21  2017 popen.py*
-rw-rw-r--  1 mininet mininet    4965 Mar 21  2017 README.md
-rwxrwxr-x  1 mininet mininet    2032 Mar 21  2017 scratchnet.py*
-rwxrwxr-x  1 mininet mininet    2455 Mar 21  2017 scratchnetuser.py*
-rwxrwxr-x  1 mininet mininet    1888 Mar 21  2017 simpleperf.py*
-rwxrwxr-x  1 mininet mininet    3040 Mar 21  2017 sshd.py*
drwxrwxr-x  2 mininet mininet    4096 Mar 21  2017 test/
-rwxrwxr-x  1 mininet mininet     522 Mar 21  2017 tree1024.py*
-rwxrwxr-x  1 mininet mininet     950 Mar 21  2017 treeping64.py*
-rwxrwxr-x  1 mininet mininet    3679 Mar 21  2017 vlanhost.py*
mininet@mininet-vm:~/mininet/examples$
```