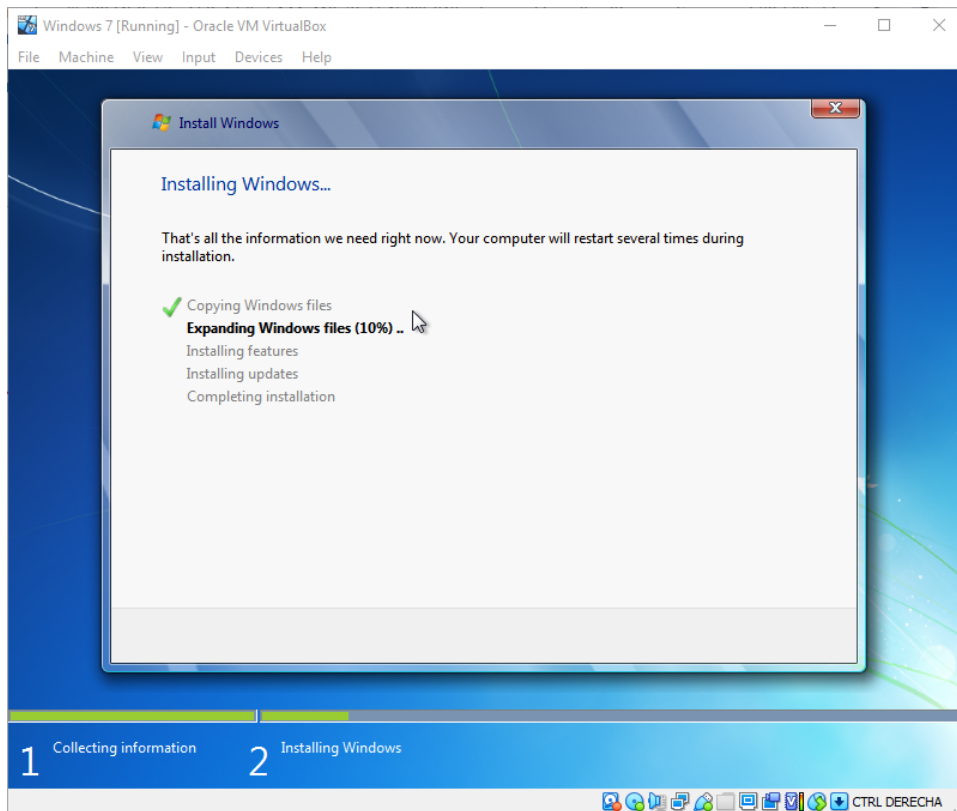


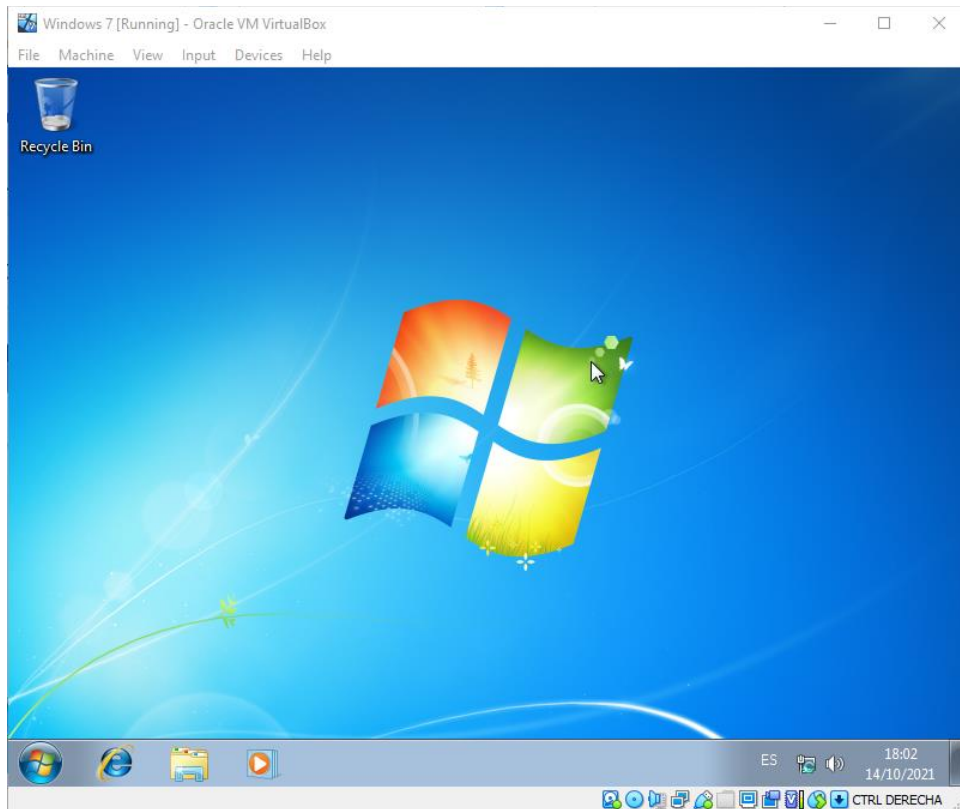
# Dual Booting Exercises

## Exercise 1

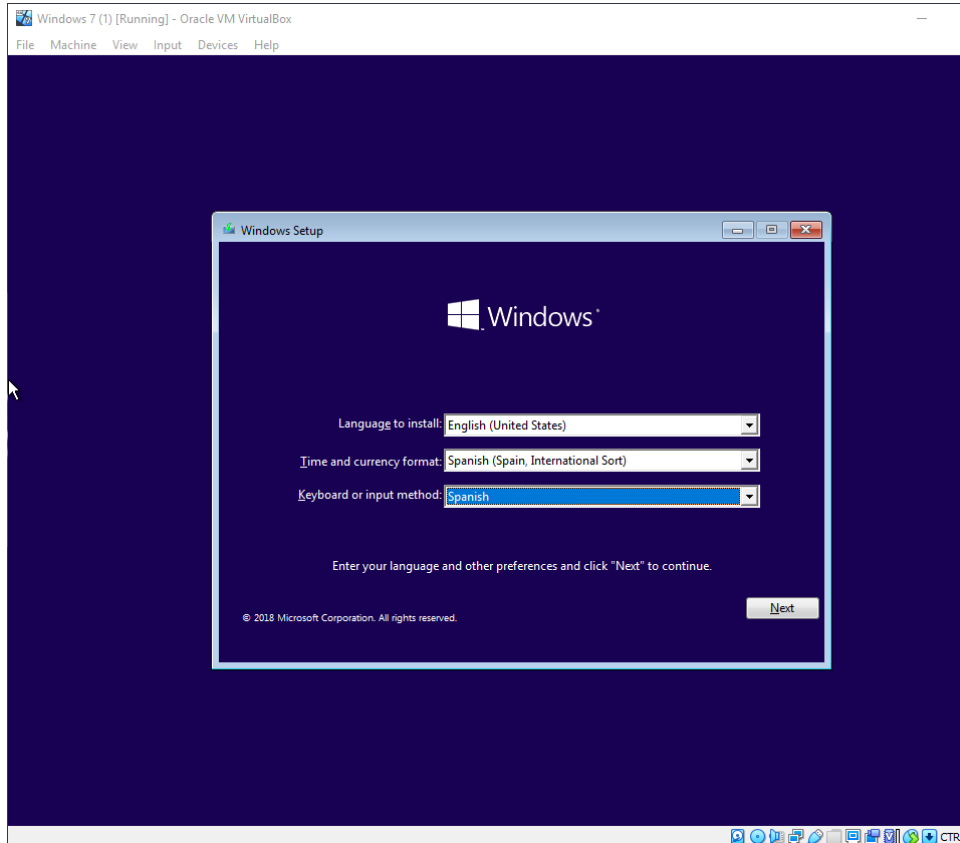
1.First Im installing Winows 7 on one VM



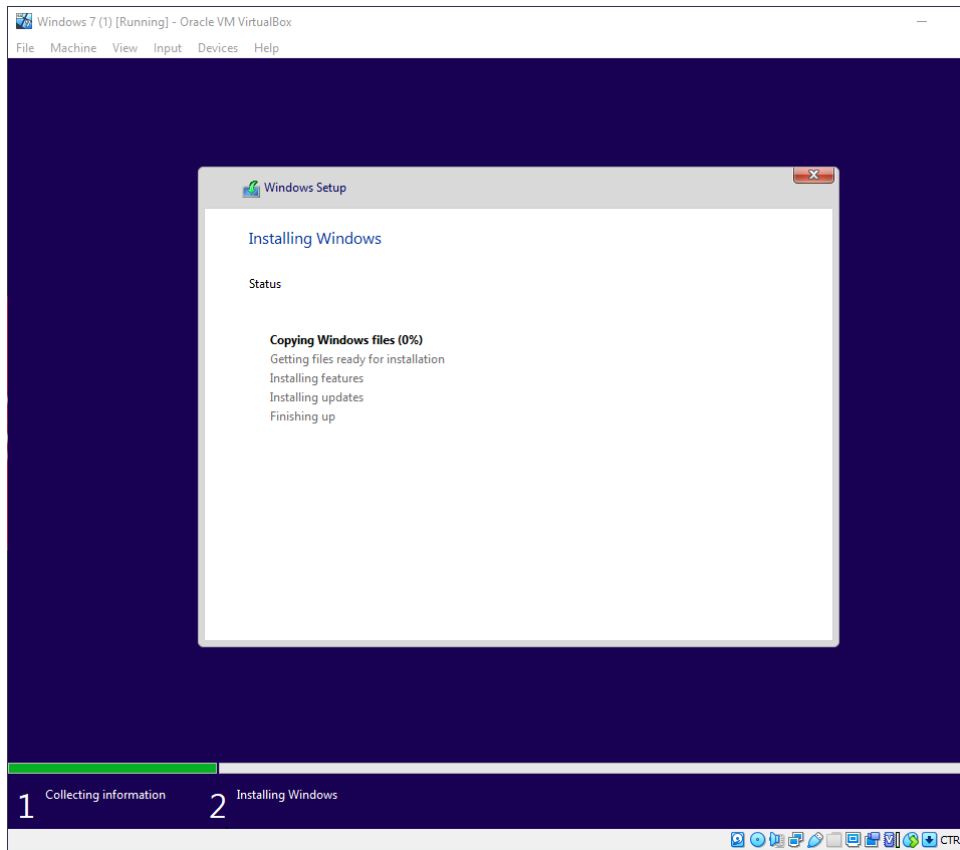
2.Here is Windows 7 installed



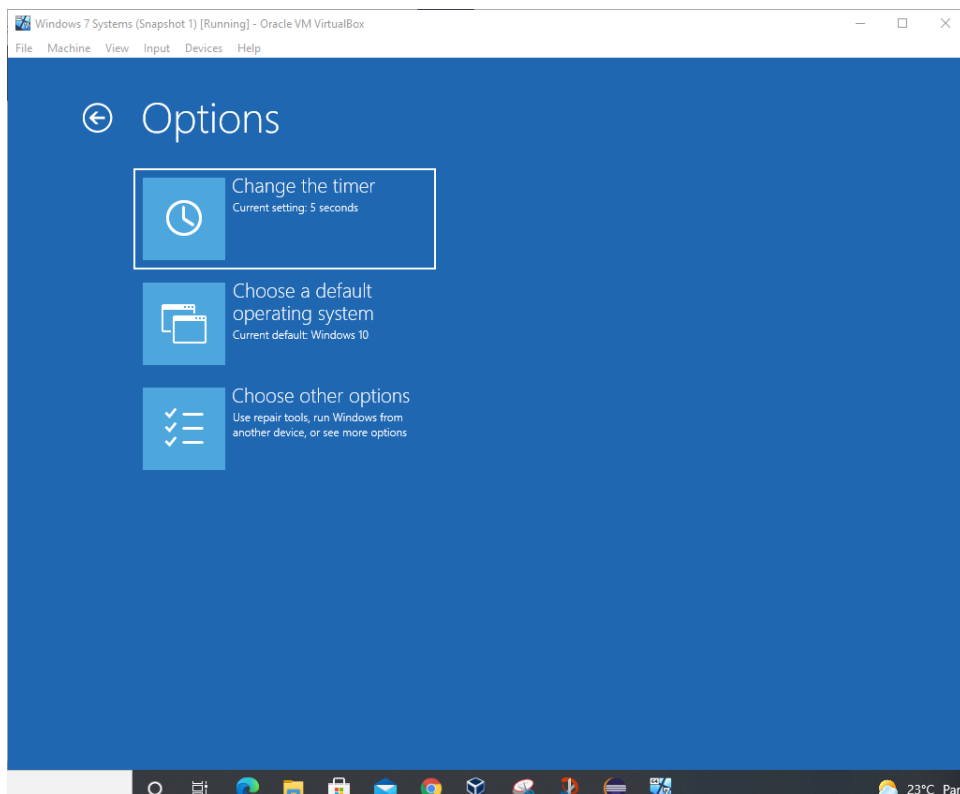
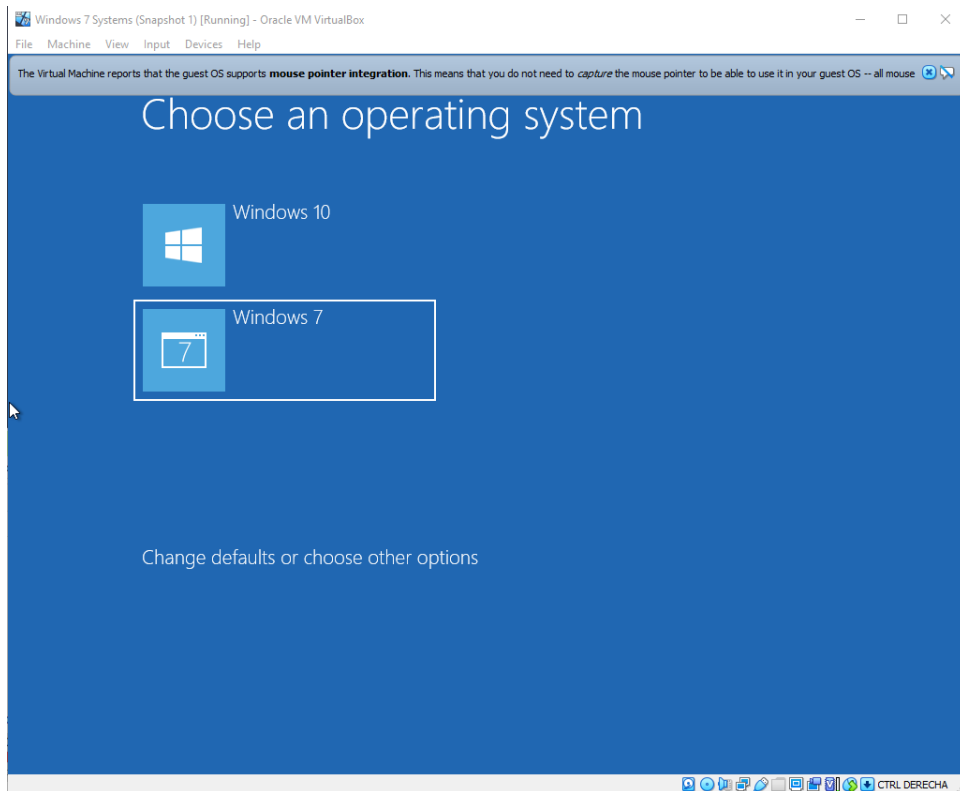
3.Then I installed Windows 10 in the same hard disk



#### 4. And here is Windows 10 installing



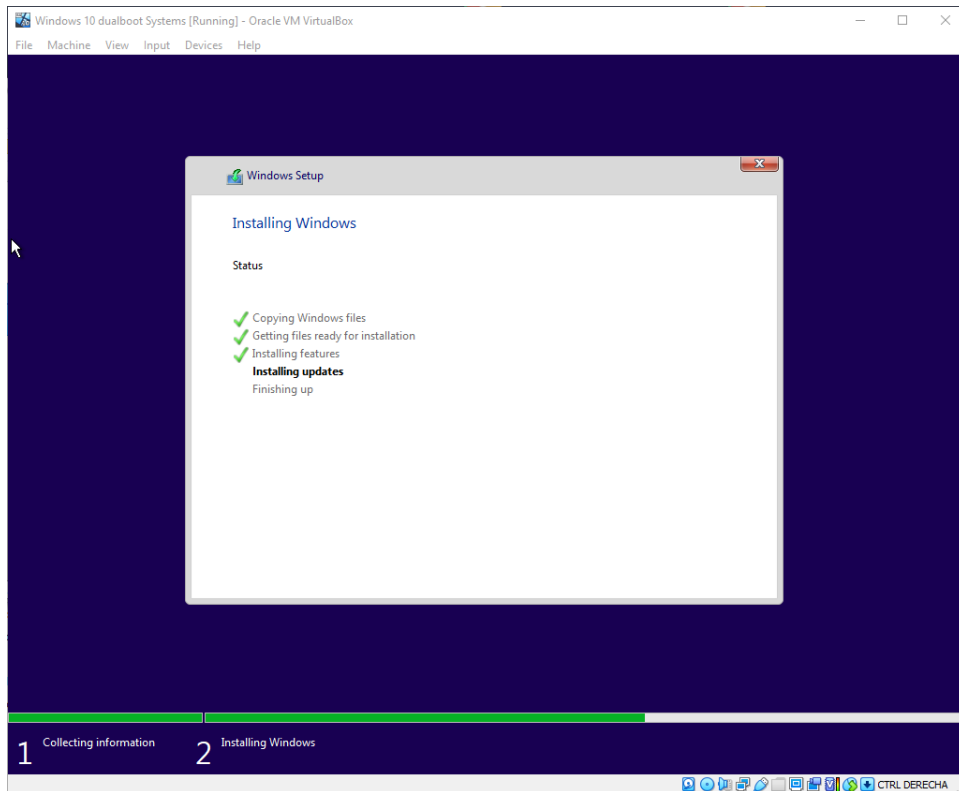
5. And here I configure the time from 3 to 5 secs, and i put Windows 10 if we dont touch nothing



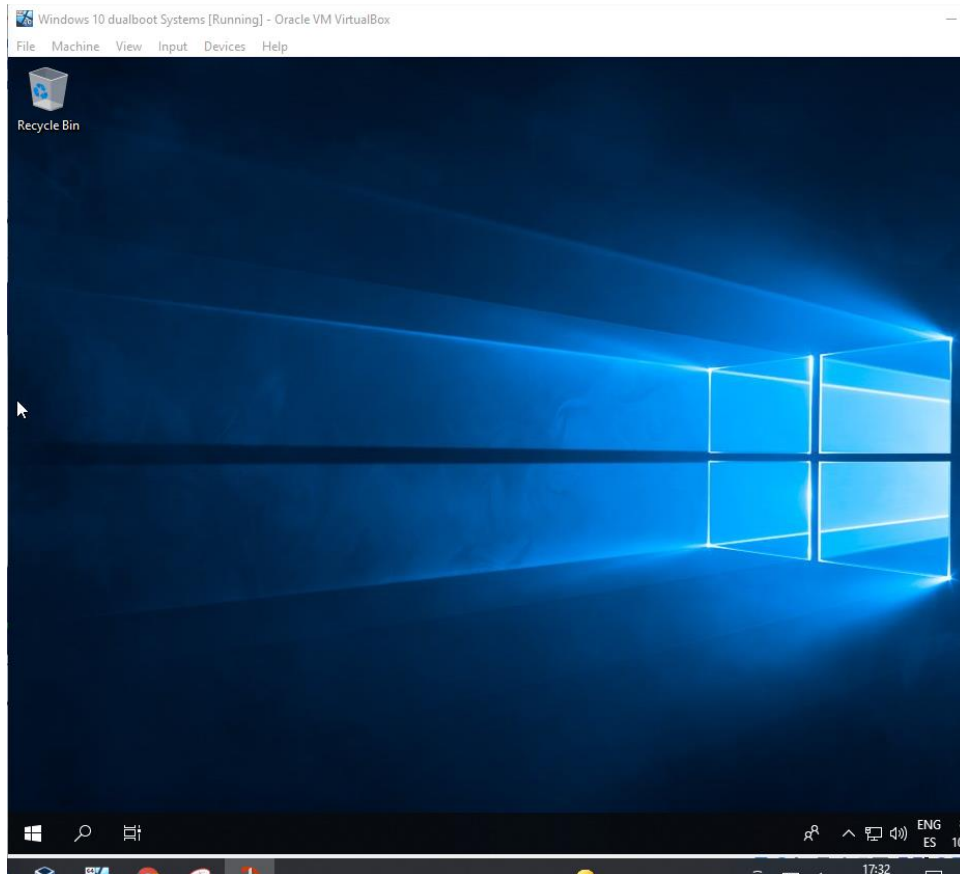
## Exercise 2

Aitor Peláez Tomás

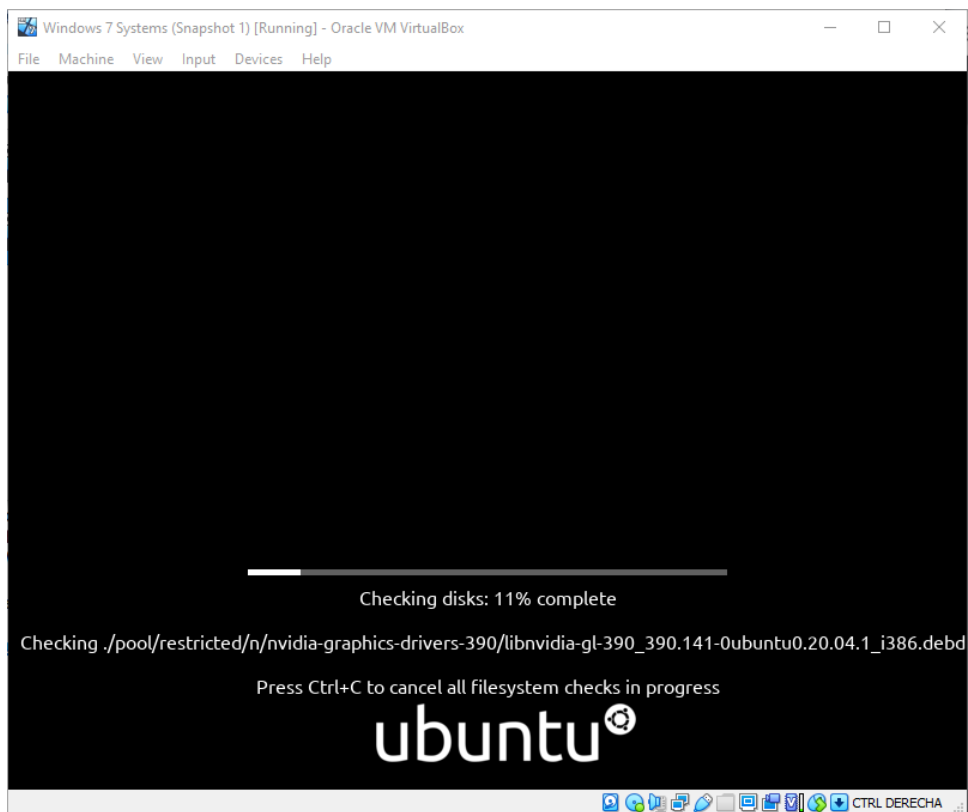
## 1.First Im installing Windows 10



2.And here is Windows 10 installed

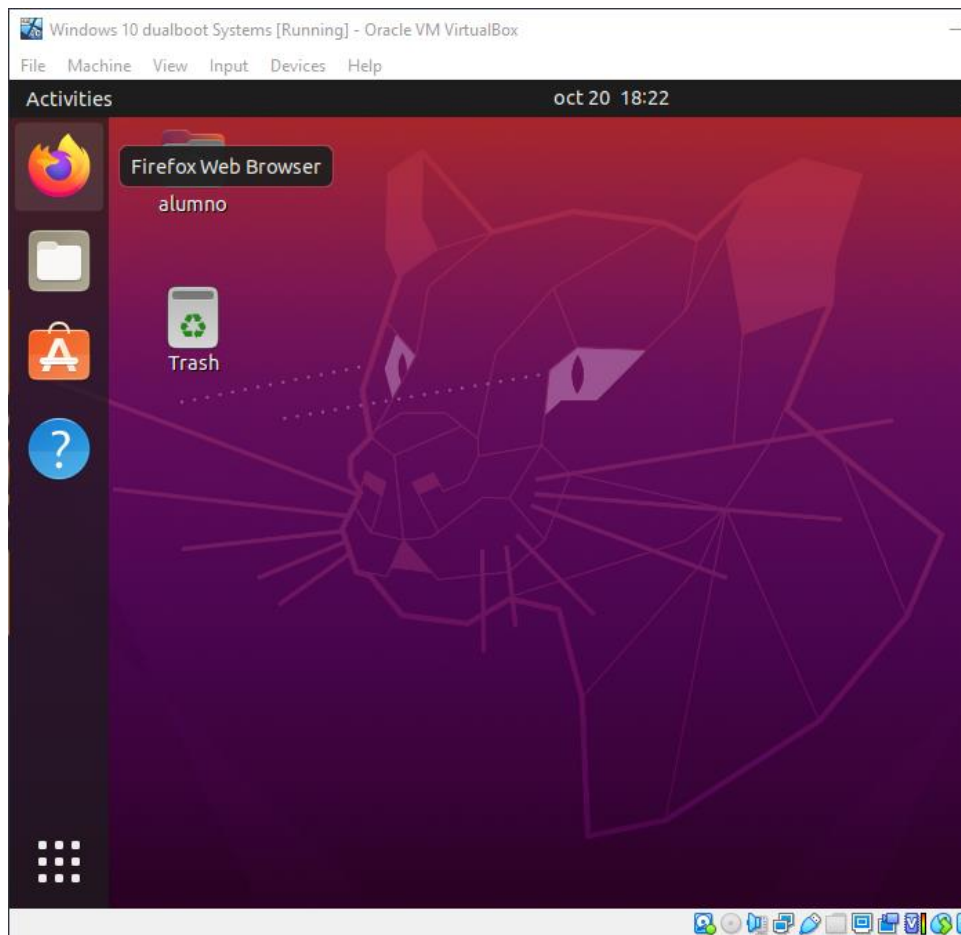


3.Secondly Im installing Ubuntu 20.04 to the same VM

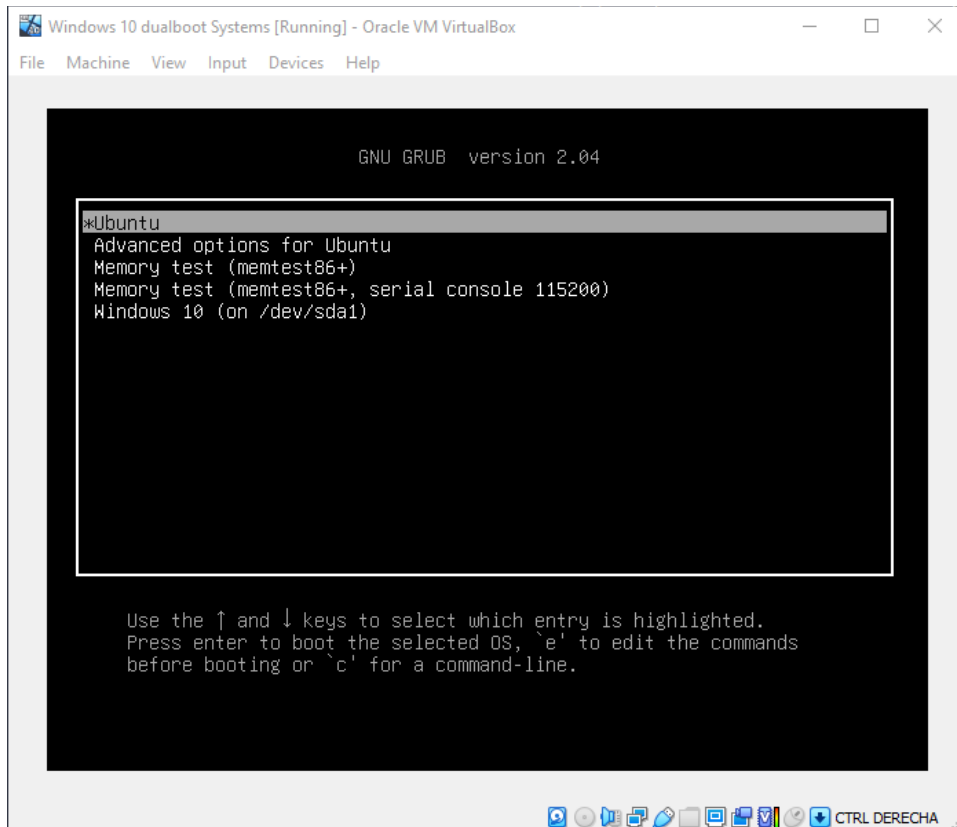


Aitor Peláez Tomás

4. Here is Ubuntu 20.04 installed



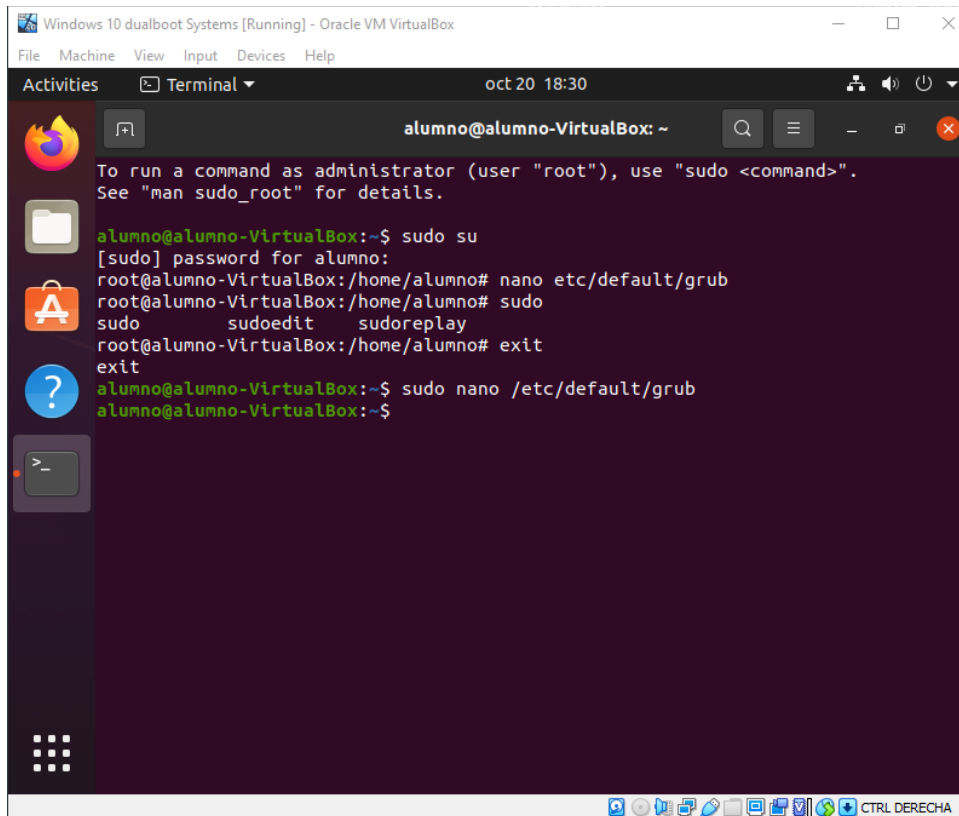
5. Now you can see the grub menu from Ubuntu 20.04



**A.**

6. Now im going to select Windows by default using the terminal from ubuntu with this command. When you finish the configuration you need to put sudo update-grub

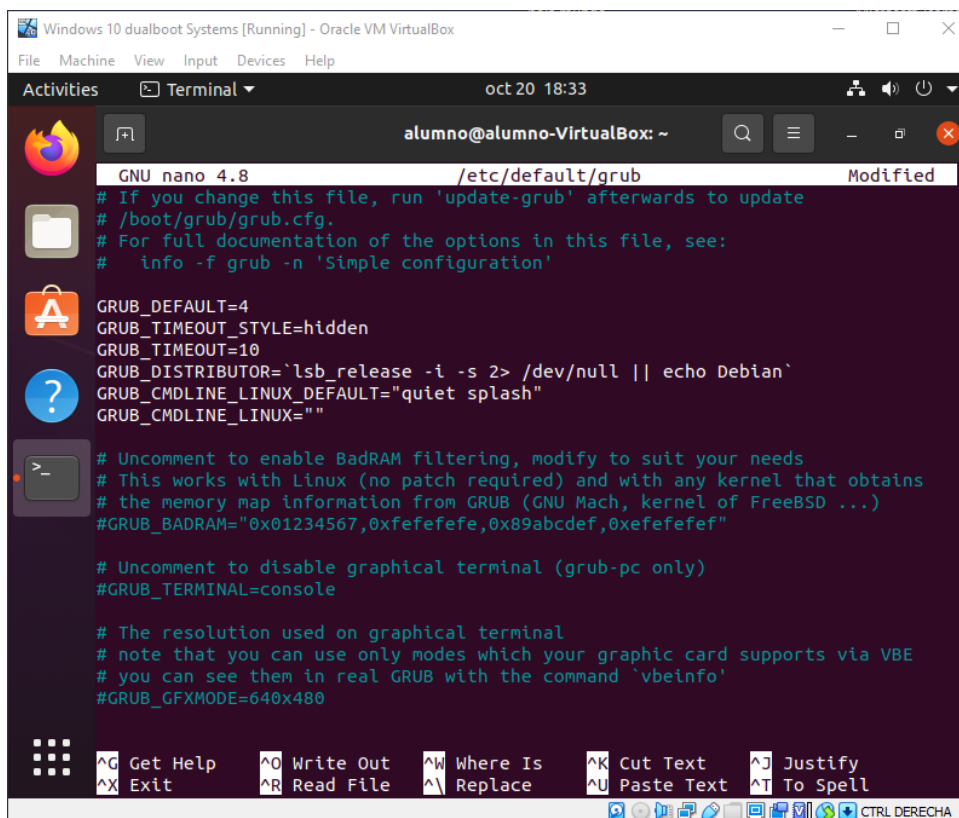




The terminal window shows the user 'alumno' at 'alumno-VirtualBox'. The user runs 'sudo su' to become root. Then, they run 'nano /etc/default/grub' to edit the GRUB configuration. The terminal shows the user navigating through the file, using 'sudoedit' and 'sudoreplay' to make changes. Finally, they run 'exit' to return to the user prompt.

```
alumno@alumno-VirtualBox: ~  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
alumno@alumno-VirtualBox:~$ sudo su  
[sudo] password for alumno:  
root@alumno-VirtualBox:/home/alumno# nano /etc/default/grub  
root@alumno-VirtualBox:/home/alumno# sudo  
sudo      sudoedit      sudoreplay  
root@alumno-VirtualBox:/home/alumno# exit  
exit  
alumno@alumno-VirtualBox:~$ sudo nano /etc/default/grub  
alumno@alumno-VirtualBox:~$
```

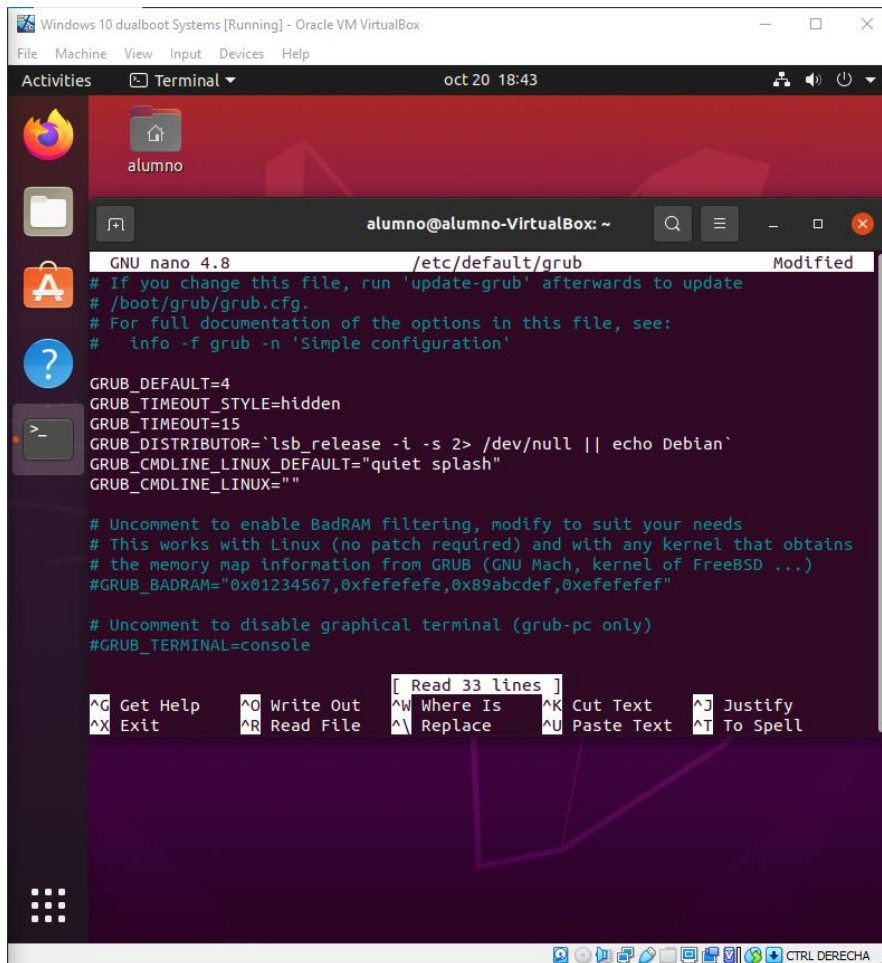
7. Then In the option GRUB\_DEFAULT you need to put the position of the operating system you need to run by default, in my case 4



The terminal window shows the contents of the file '/etc/default/grub' being edited with 'GNU nano 4.8'. The file contains various GRUB configuration options, including 'GRUB\_DEFAULT=4', 'GRUB\_TIMEOUT\_STYLE=hidden', 'GRUB\_TIMEOUT=10', and 'GRUB\_DISTRIBUTOR=\lsb\_release -i -s 2> /dev/null || echo Debian'. The user has modified the 'GRUB\_DEFAULT' value to '4'.

```
GNU nano 4.8 /etc/default/grub Modified  
# If you change this file, run 'update-grub' afterwards to update  
# /boot/grub/grub.cfg.  
# For full documentation of the options in this file, see:  
#   info -f grub -n 'Simple configuration'  
  
GRUB_DEFAULT=4  
GRUB_TIMEOUT_STYLE=hidden  
GRUB_TIMEOUT=10  
GRUB_DISTRIBUTOR=\lsb_release -i -s 2> /dev/null || echo Debian`  
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"  
GRUB_CMDLINE_LINUX=""  
  
# Uncomment to enable BadRAM filtering, modify to suit your needs  
# This works with Linux (no patch required) and with any kernel that obtains  
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)  
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"  
  
# Uncomment to disable graphical terminal (grub-pc only)  
#GRUB_TERMINAL=console  
  
# The resolution used on graphical terminal  
# note that you can use only modes which your graphic card supports via VBE  
# you can see them in real GRUB with the command 'vbeinfo'  
#GRUB_GFXMODE=640x480  
  
^G Get Help      ^O Write Out    ^W Where Is     ^K Cut Text      ^J Justify  
^X Exit          ^R Read File    ^A Replace      ^U Paste Text   ^T To Spell
```

8. Now I'm going to change the time out from GRUB\_TIMEOUT from 10 secs to 15 secs



```
Windows 10 dualboot Systems [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal oct 20 18:43
alumno
GNU nano 4.8 /etc/default/grub Modified
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
# info -f grub -n 'Simple configuration'

GRUB_DEFAULT=4
GRUB_TIMEOUT_STYLE=hidden
GRUB_TIMEOUT=15
GRUB_DISTRIBUTOR='lsb_release -i -s 2> /dev/null || echo Debian'
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""

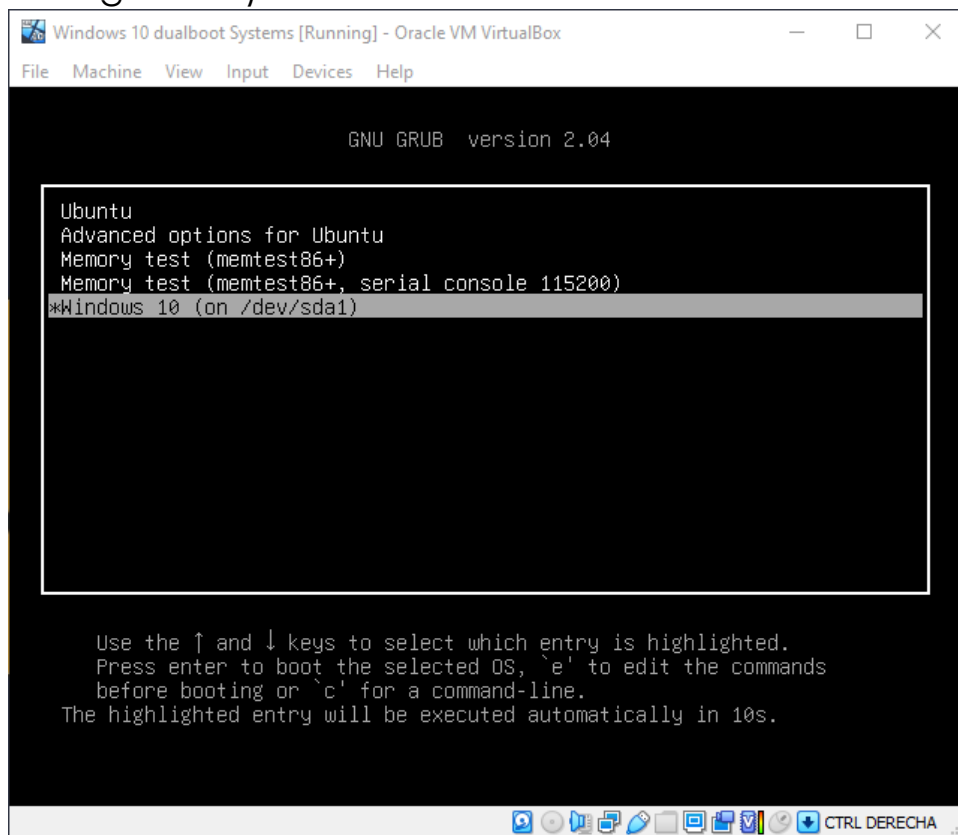
# Uncomment to enable BadRAM filtering, modify to suit your needs
# This works with Linux (no patch required) and with any kernel that obtains
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"

# Uncomment to disable graphical terminal (grub-pc only)
#GRUB_TERMINAL=console

[ Read 33 lines ]
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify
^X Exit ^R Read File ^_ Replace ^U Paste Text ^T To Spell
CTRL DERECHA
```

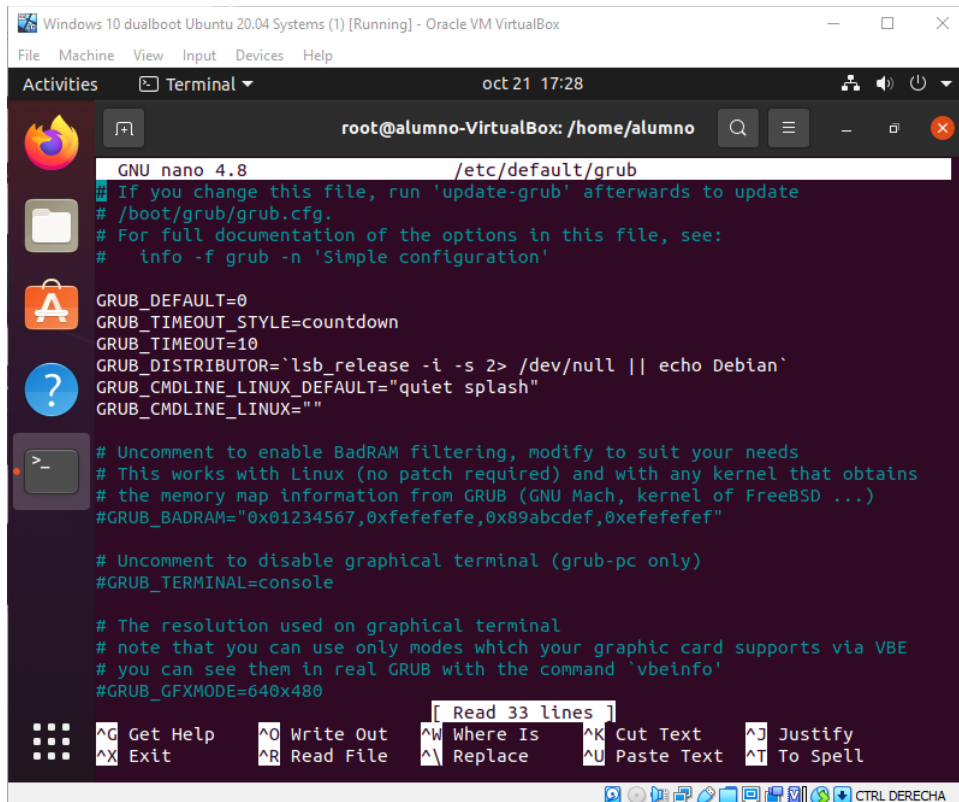
9. And here is the grub and the configurations (on the photo the timeout is 10 because I last 5 secs to take the screenshot but is well

configured)



## B.

1. Then I selected Ubuntu as default again, I changed the timeout to 10 secs and i changed the style from hidden to countdown. This is on /etc/default/grub



```
GNU nano 4.8 /etc/default/grub
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
#   info -f grub -n 'Simple configuration'

GRUB_DEFAULT=0
GRUB_TIMEOUT_STYLE=countdown
GRUB_TIMEOUT=10
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""

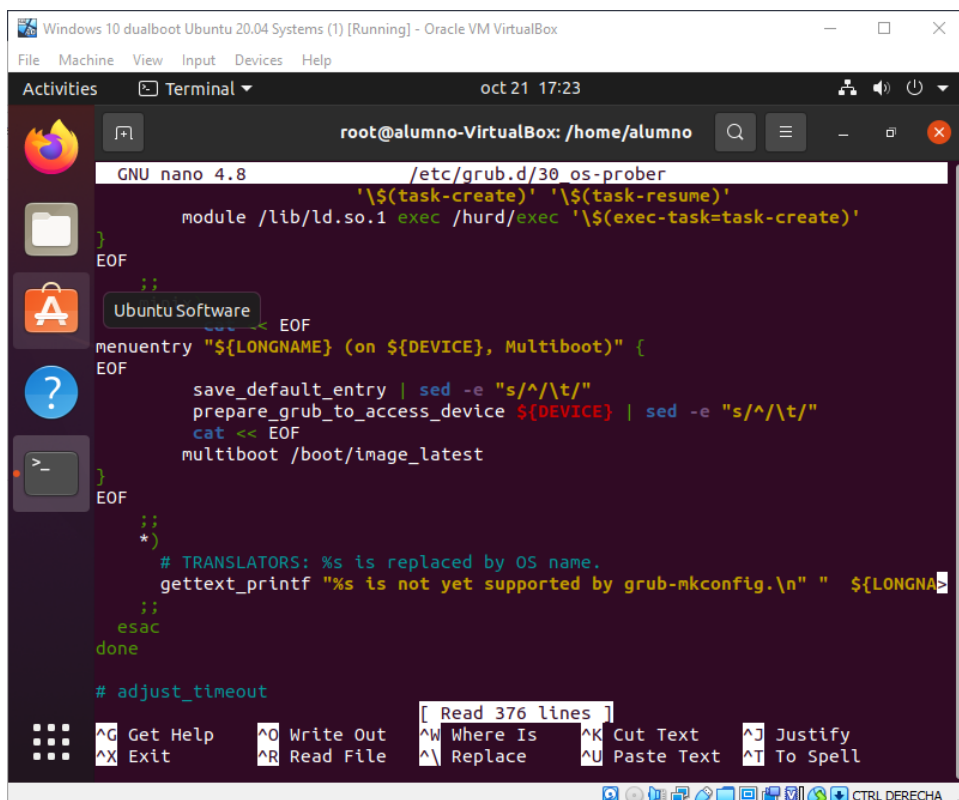
# Uncomment to enable BadRAM filtering, modify to suit your needs
# This works with Linux (no patch required) and with any kernel that obtains
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"

# Uncomment to disable graphical terminal (grub-pc only)
#GRUB_TERMINAL=console

# The resolution used on graphical terminal
# note that you can use only modes which your graphic card supports via VBE
# you can see them in real GRUB with the command 'vbeinfo'
#GRUB_GFXMODE=640x480

[ Read 33 lines ]
^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text   ^J Justify
^X Exit      ^R Read File  ^_ Replace    ^U Paste Text ^T To Spell
```

2. Continuously I go to /etc/grub.d/30\_os-prober and I go to the bottom. Here I put a hashtag on the last sentence that say: adjust\_timeout

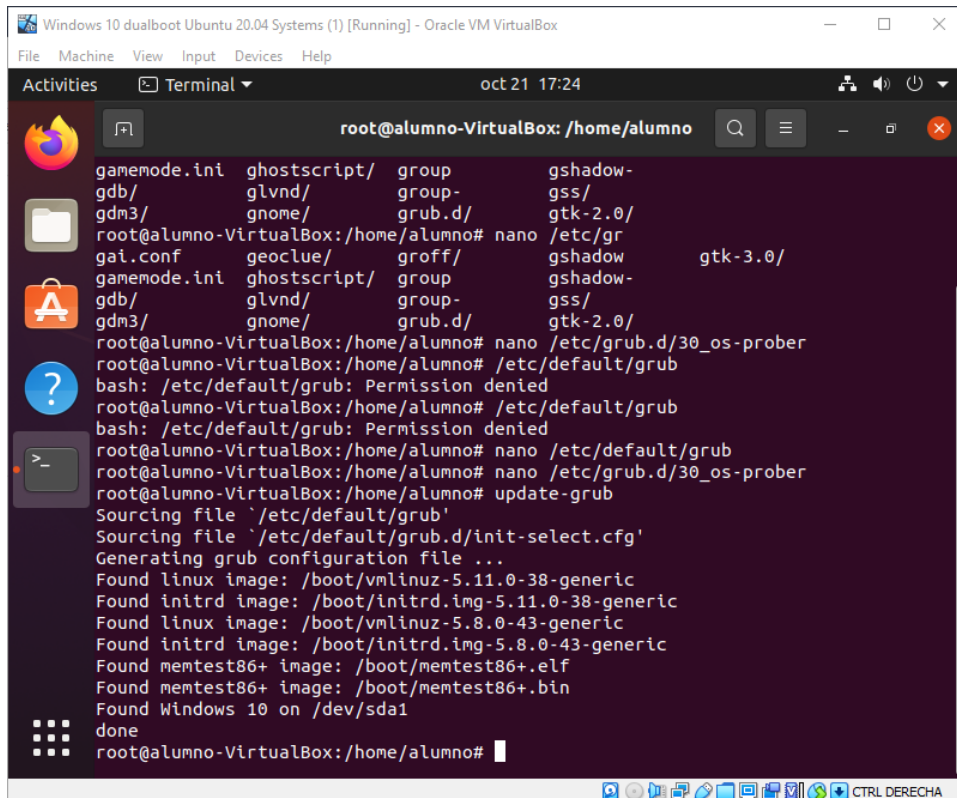


```
GNU nano 4.8 /etc/grub.d/30_os-prober
'${task-create}' '${task-resume}'
module /lib/ld.so.1 exec /hurd/exec '${exec-task=task-create}'
EOF
;;
Ubuntu Software EOF
menuentry "${LONGNAME} (on ${DEVICE}, Multiboot)" {
EOF
    save_default_entry | sed -e "s/^/\t/"
    prepare_grub_to_access_device ${DEVICE} | sed -e "s/^/\t/"
    cat << EOF
    multiboot /boot/image_latest
}
EOF
;;
*)
# TRANSLATORS: %s is replaced by OS name.
gettext_printf "%s is not yet supported by grub-mkconfig.\n" "${LONGNAME}
;;
esac
done

# adjust_timeout

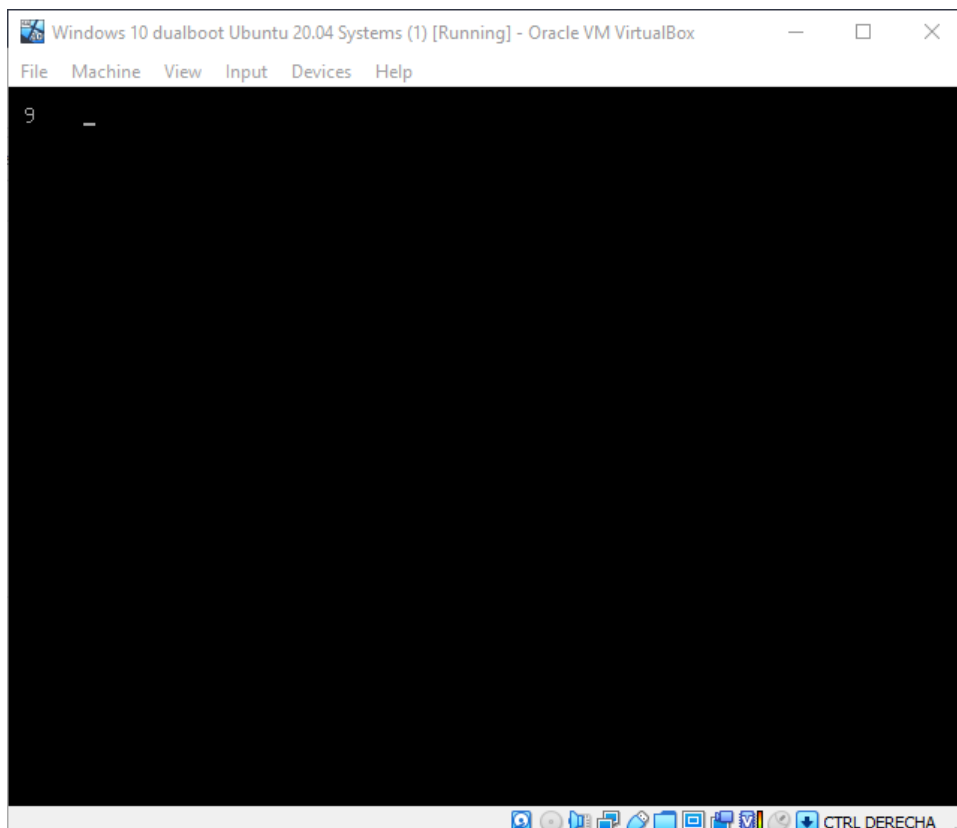
[ Read 376 lines ]
^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text   ^J Justify
^X Exit      ^R Read File  ^_ Replace    ^U Paste Text ^T To Spell
```

### 3. Now I put update grub



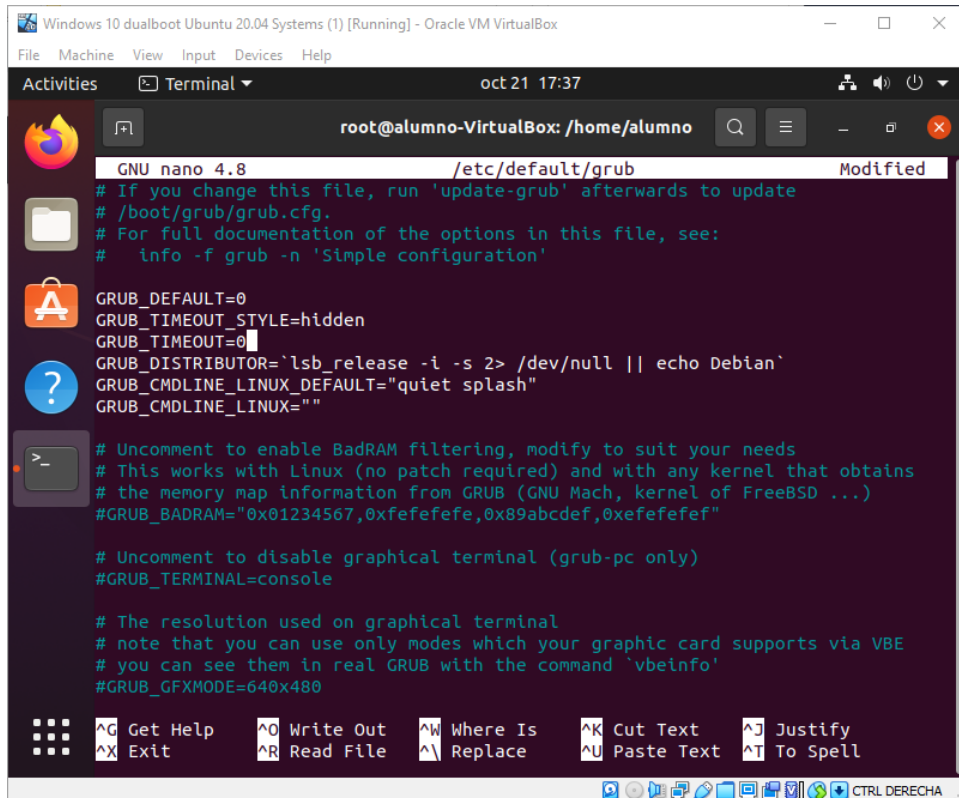
```
root@alumno-VirtualBox: /home/alumno# nano /etc/grub.d/30_os-prober
root@alumno-VirtualBox: /home/alumno# /etc/default/grub
bash: /etc/default/grub: Permission denied
root@alumno-VirtualBox: /home/alumno# /etc/default/grub
bash: /etc/default/grub: Permission denied
root@alumno-VirtualBox: /home/alumno# nano /etc/default/grub
root@alumno-VirtualBox: /home/alumno# nano /etc/grub.d/30_os-prober
root@alumno-VirtualBox: /home/alumno# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.11.0-38-generic
Found initrd image: /boot/initrd.img-5.11.0-38-generic
Found linux image: /boot/vmlinuz-5.8.0-43-generic
Found initrd image: /boot/initrd.img-5.8.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Found Windows 10 on /dev/sda1
done
root@alumno-VirtualBox: /home/alumno#
```

### 4. Here we can see that is going well



## C.

1. First I put the style to hidden and the timeout to 0



The screenshot shows a terminal window titled "root@alumno-VirtualBox: /home/alumno" with a timestamp of "oct 21 17:37". The terminal is running the GNU nano 4.8 editor, editing the file "/etc/default/grub". The file content is as follows:

```
GNU nano 4.8 /etc/default/grub Modified
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
#   info -f grub -n 'Simple configuration'

GRUB_DEFAULT=0
GRUB_TIMEOUT_STYLE=hidden
GRUB_TIMEOUT=0
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""

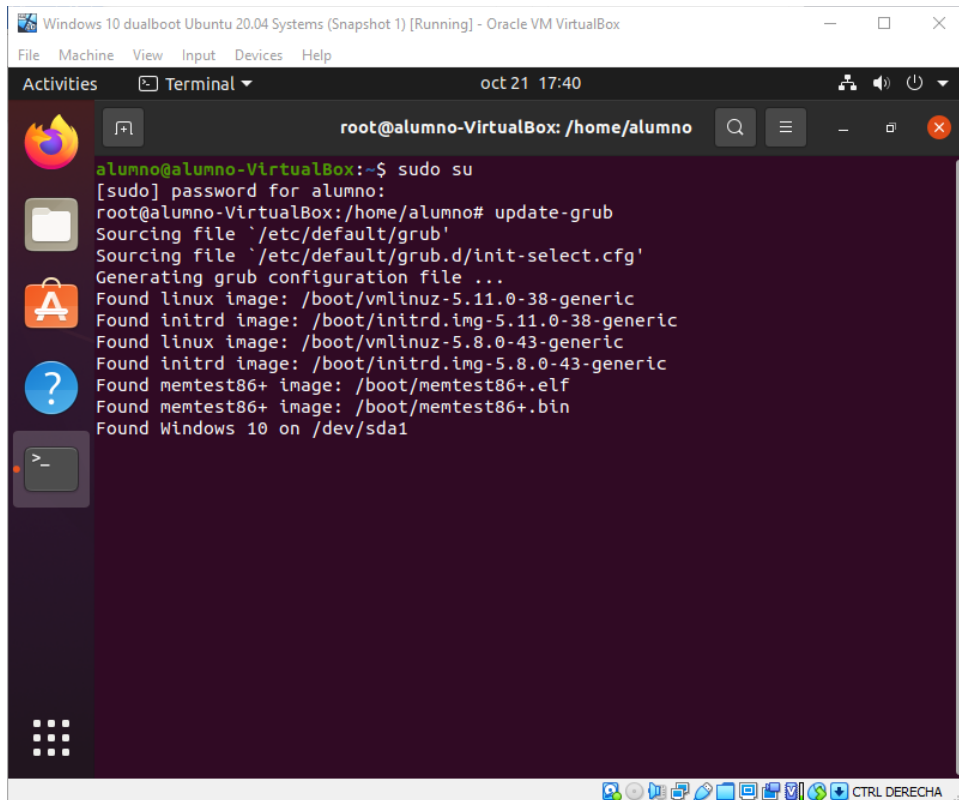
# Uncomment to enable BadRAM filtering, modify to suit your needs
# This works with Linux (no patch required) and with any kernel that obtains
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"

# Uncomment to disable graphical terminal (grub-pc only)
#GRUB_TERMINAL=console

# The resolution used on graphical terminal
# note that you can use only modes which your graphic card supports via VBE
# you can see them in real GRUB with the command 'vbeinfo'
#GRUB_GFXMODE=640x480

^G Get Help   ^O Write Out  ^W Where Is   ^K Cut Text    ^J Justify
^X Exit       ^R Read File  ^_ Replace    ^U Paste Text  ^T To Spell
```

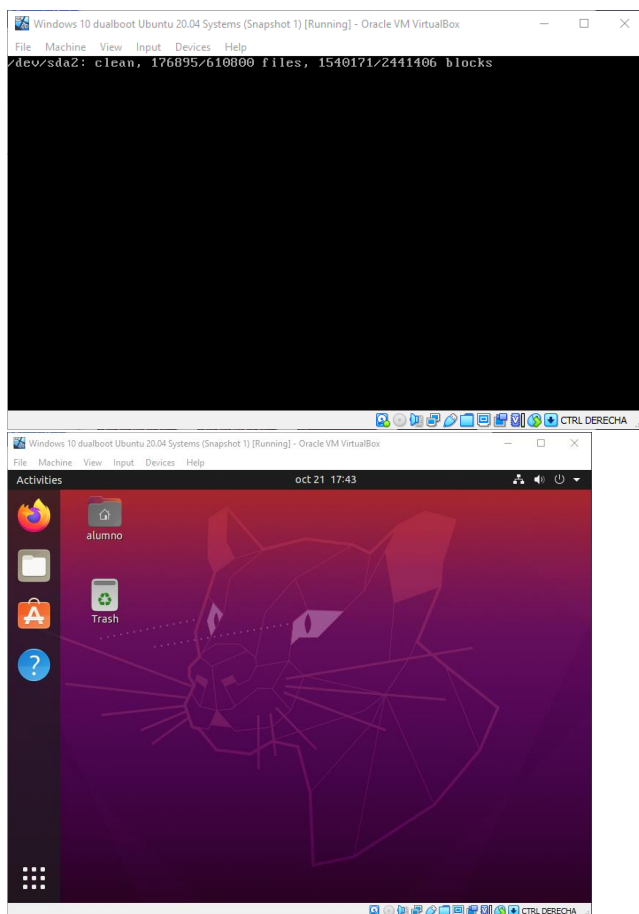
2. Then I put update-grub



```
Windows 10 dualboot Ubuntu 20.04 Systems (Snapshot 1) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal oct 21 17:40
root@alumno-VirtualBox: /home/alumno

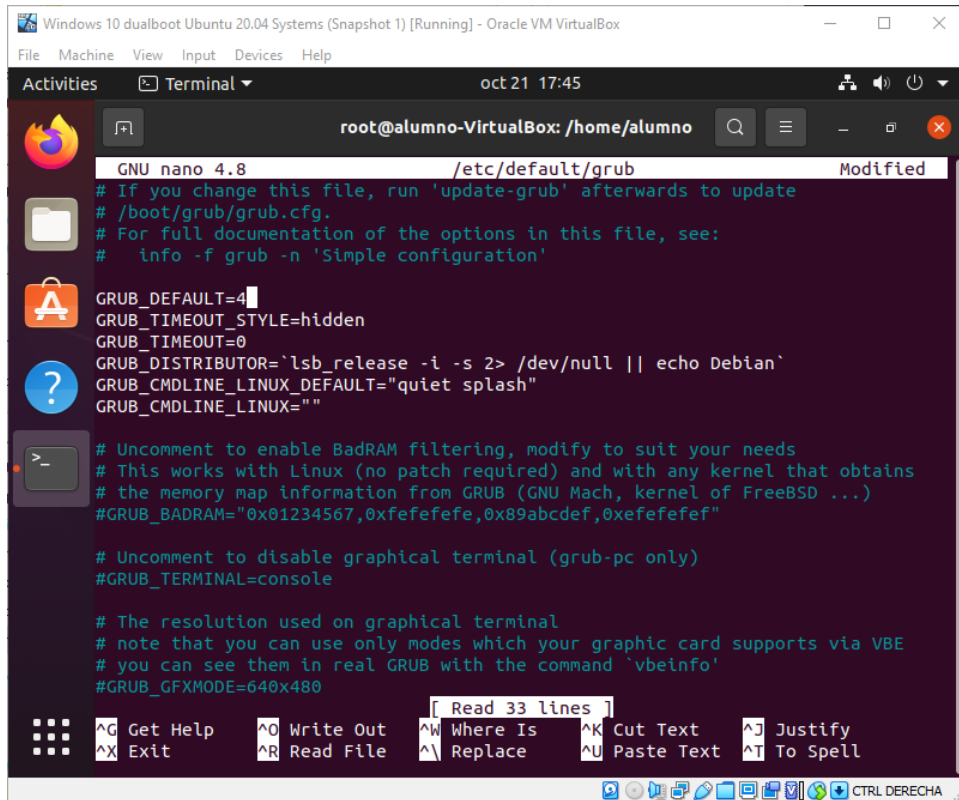
alumno@alumno-VirtualBox:~$ sudo su
[sudo] password for alumno:
root@alumno-VirtualBox:~# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.11.0-38-generic
Found initrd image: /boot/initrd.img-5.11.0-38-generic
Found linux image: /boot/vmlinuz-5.8.0-43-generic
Found initrd image: /boot/initrd.img-5.8.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Found Windows 10 on /dev/sda1
```

3.And here we can see thats is working good



## D.

1.First I changed the default from 0 to 4, that is WIndows 10



The screenshot shows a VirtualBox window titled "Windows 10 dualboot Ubuntu 20.04 Systems (Snapshot 1) [Running] - Oracle VM VirtualBox". Inside, a terminal window is open with the prompt "root@alumno-VirtualBox: /home/alumno". The terminal is running the GNU nano 4.8 editor, editing the file "/etc/default/grub". The file content is as follows:

```
GNU nano 4.8 /etc/default/grub Modified
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
#   info -f grub -n 'Simple configuration'

GRUB_DEFAULT=4
GRUB_TIMEOUT_STYLE=hidden
GRUB_TIMEOUT=0
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""

# Uncomment to enable BadRAM filtering, modify to suit your needs
# This works with Linux (no patch required) and with any kernel that obtains
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"

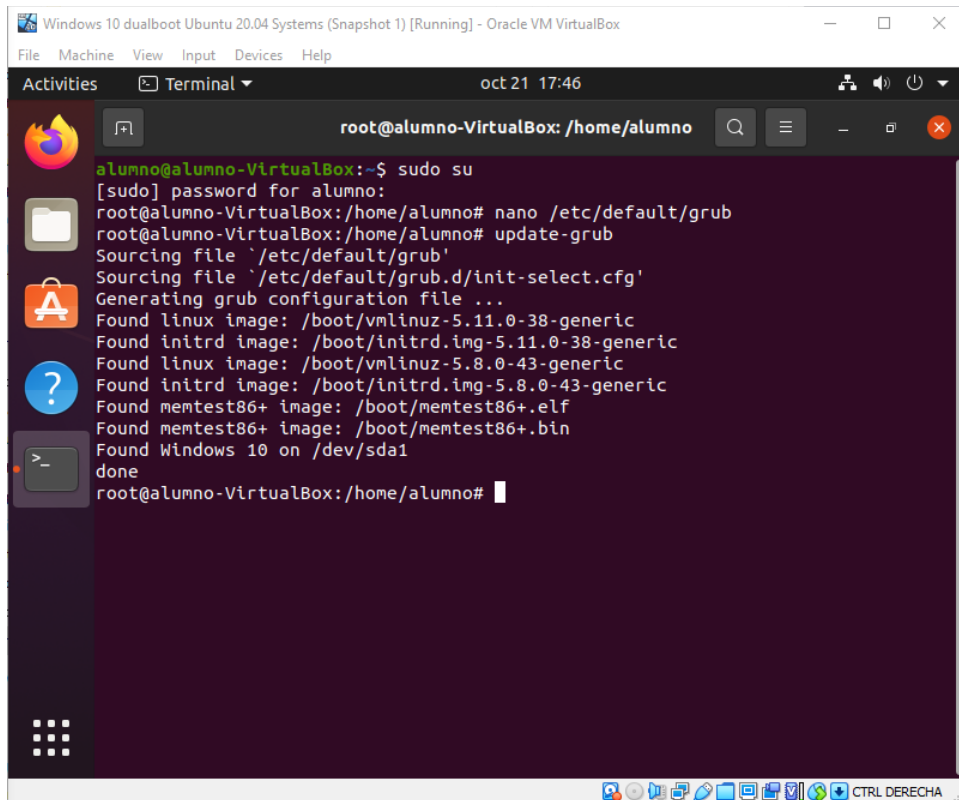
# Uncomment to disable graphical terminal (grub-pc only)
#GRUB_TERMINAL=console

# The resolution used on graphical terminal
# note that you can use only modes which your graphic card supports via VBE
# you can see them in real GRUB with the command 'vbeinfo'
#GRUB_GFXMODE=640x480
```

At the bottom of the terminal, there is a status bar with various keyboard shortcuts: ^G Get Help, ^O Write Out, ^W Where Is, ^K Cut Text, ^J Justify, ^X Exit, ^R Read File, ^\_ Replace, ^U Paste Text, ^T To Spell. A tooltip "Read 33 lines" is visible over the status bar.

2.Then I put update-grub





```
Windows 10 dualboot Ubuntu 20.04 Systems (Snapshot 1) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal oct 21 17:46
root@alumno-VirtualBox: /home/alumno

alumno@alumno-VirtualBox:~$ sudo su
[sudo] password for alumno:
root@alumno-VirtualBox:/home/alumno# nano /etc/default/grub
root@alumno-VirtualBox:/home/alumno# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.11.0-38-generic
Found initrd image: /boot/initrd.img-5.11.0-38-generic
Found linux image: /boot/vmlinuz-5.8.0-43-generic
Found initrd image: /boot/initrd.img-5.8.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Found Windows 10 on /dev/sda1
done
root@alumno-VirtualBox:/home/alumno#
```

3.And this is what happens. What I do is to take a snapshot before I restart the VM(allways recomendado). What I do is delete the snapshot and start on the previous one.

