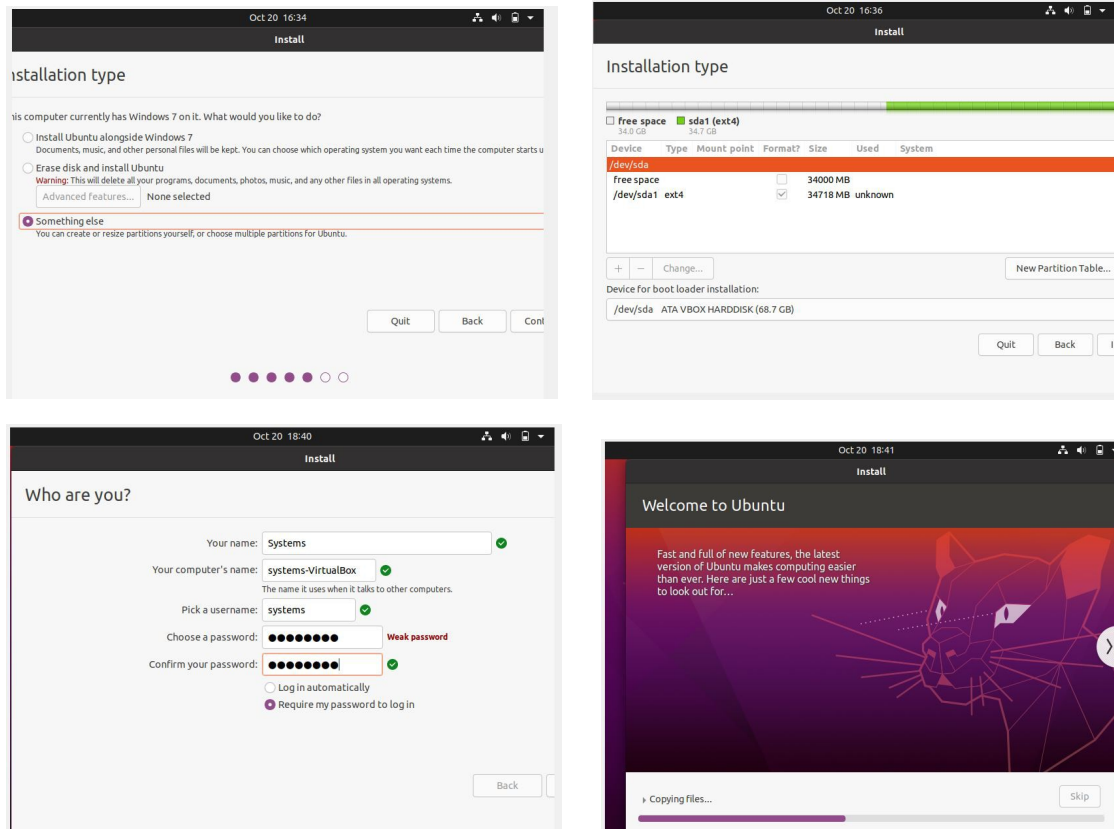


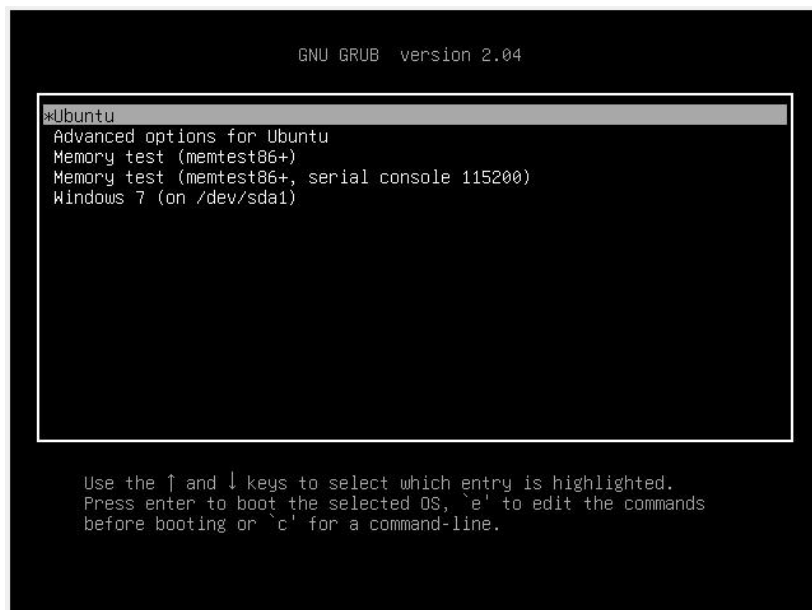
# DUAL BOOT EXERCISES

## 2. Create a virtual machine with two operating systems, Windows 7 (or Windows 10) and Ubuntu 20.04 (in this order)

I already installed W7, so here I'm installing Ubuntu:



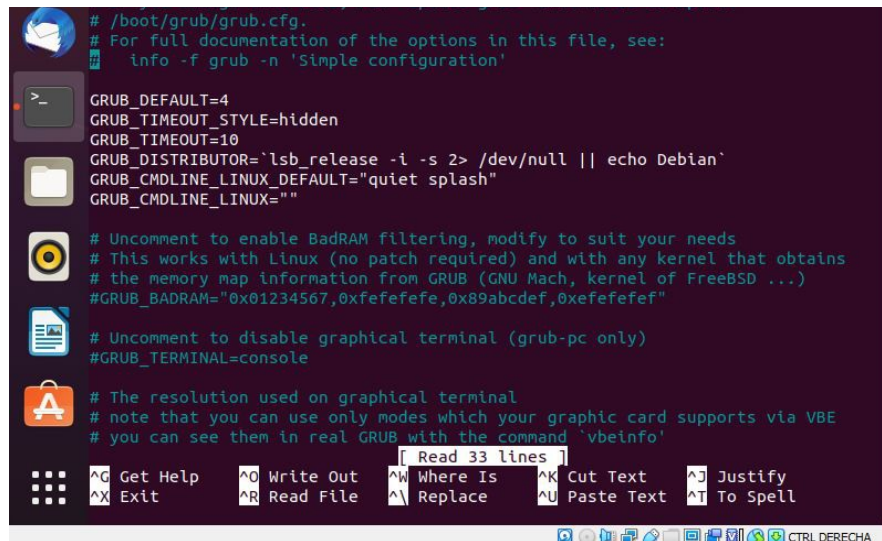
Here we can see both operative systems installed in the GRUB menu:



and configure the bootloader to:

Here, the commands to access the GRUB modification system:

after getting sudo permissions: nano /etc/default/grub



```
# /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'
```

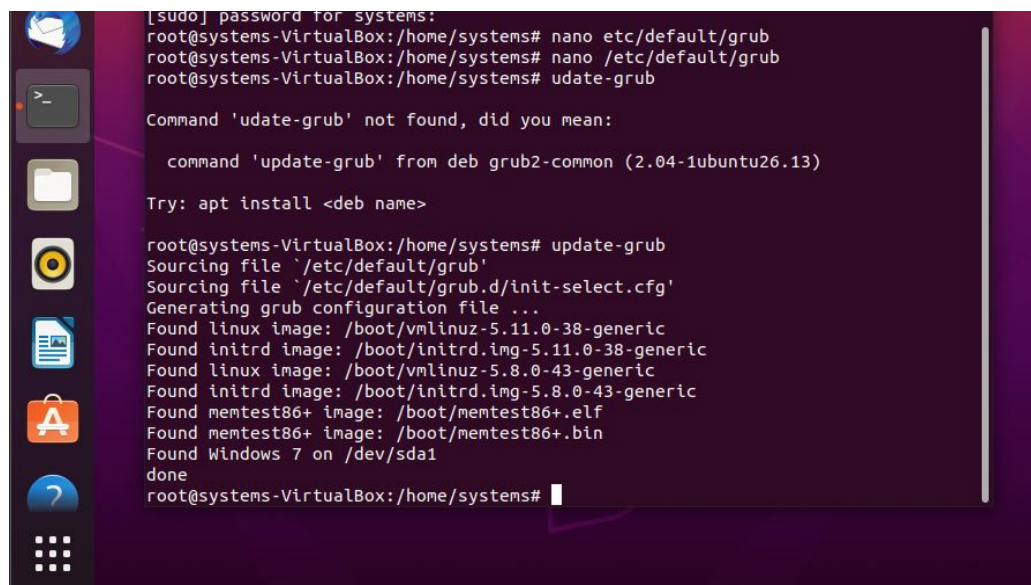
This in /etc/grub.d/30\_os-prober



```
# TRANSLATORS: %s is replaced by OS name.
gettext_printf "%s is not yet supported by grub-mkconfig.\n" " ${LONGNAME}
;;
esac
done

adjust_timeout
```

This to save the changes everytime:



A terminal window in a VirtualBox environment. The user is at the root prompt of a system named 'systems-VirtualBox'. They enter the command 'update-grub' after editing the GRUB configuration file. The terminal shows the command being executed, the sourcing of configuration files, and the detection of various boot images (Linux, initrd, memtest86+, and Windows 7). The process completes successfully, and the prompt returns to the root user.

```
[sudo] password for systems:
root@systems-VirtualBox:/home/systems# nano etc/default/grub
root@systems-VirtualBox:/home/systems# nano /etc/default/grub
root@systems-VirtualBox:/home/systems# udate-grub

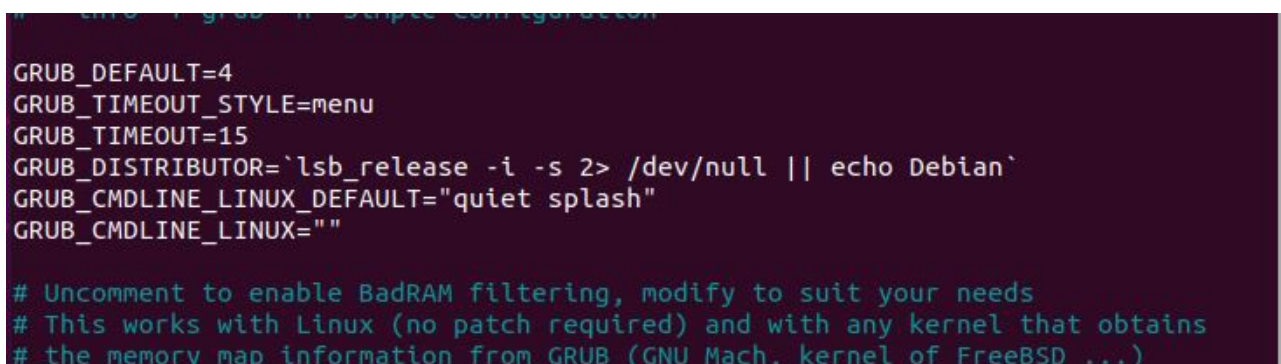
Command 'update-grub' not found, did you mean:

  command 'update-grub' from deb grub2-common (2.04-1ubuntu26.13)

Try: apt install <deb name>

root@systems-VirtualBox:/home/systems# 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 7 on /dev/sda1
done
root@systems-VirtualBox:/home/systems#
```

- a. Set Windows as default entry and boot after 15 seconds if the user does not select another option in the menu.



A terminal window showing the content of the GRUB configuration file. The file is being edited in nano. The configuration includes setting the default entry to 4, the timeout style to menu, and the timeout to 15 seconds. It also includes a command to echo the Debian version and a comment about enabling BadRAM filtering.

```
# ...
GRUB_DEFAULT=4
GRUB_TIMEOUT_STYLE=menu
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 ...)
```

**b. Boot Ubuntu without displaying the menu after showing a 10 seconds countdown.**

```
# 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
```

**c. Boot Ubuntu without displaying the menu.**

```
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=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 ...)
```

**d. Boot Windows without displaying the menu.**

```
# 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-ec only)
```