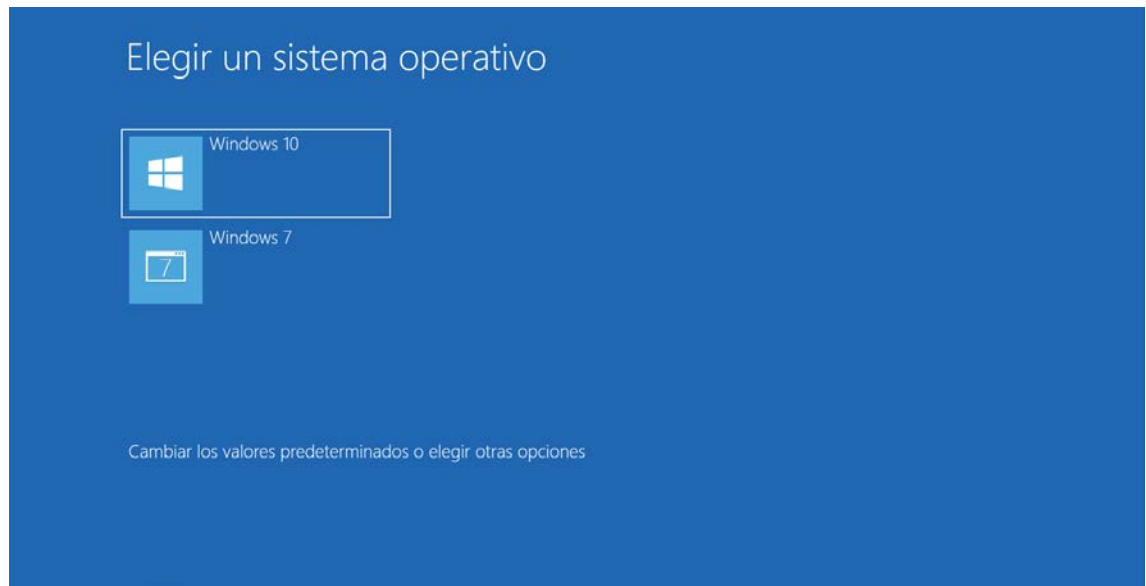


Create a document with screenshots to explain the answer for each exercise

1. Create a virtual machine with two operating systems, Windows 7 and Windows 10 (in this order). Choose Windows 7 as the default operating system, which will boot after 5 seconds unless Windows 10 is manually selected.

I have installed first windows 7 and then windows 10 so the boot-loader working is the windows 10 one.

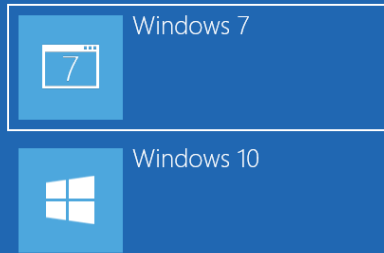


Selecting the default operating system to boot.



← Elegir un sistema operativo predeterminado

El valor predeterminado actual es Windows 7.




Ching the time abiable te select an operating system


← Opciones




⬅ Cambiar el temporizador

Puedes elegir el tiempo de espera antes de que el sistema operativo predeterminado se ejecute automáticamente. La configuración actual es 5 segundos.

 5 minutos

 30 segundos

 5 segundos

Adm. arranque Windows

Elija un sistema operativo que desee iniciar o presione la tecla Tabulador para seleccionar una herramienta:
(Use las teclas de dirección para resaltar su elección y presione Entrar.)

Windows 10
Windows 7 >

Para especificar una opción avanzada de esta elección, presione la tecla F8.
Segundos hasta que la opción resaltada se inicie automáticamente: 3

Herramientas:

Herramienta de diagnóstico de memoria de Windows

Entrar=Elegir

Tabulador=Menú

Esc=Cancelar

2. Create a virtual machine with two operating systems, Windows 7 (or Windows 10) and Ubuntu 16.04 (in this order) and configure the bootloader to:

Install

Installation type

This computer currently has Windows 10 on it. What would you like to do?

☐ Install Ubuntu alongside Windows 10
Documents, music, and other personal files will be kept. You can choose which operating system you want each time the computer starts up.

☐ Erase disk and install Ubuntu
Warning: This will delete all your programs, documents, photos, music, and any other files in all operating systems.
 None selected

☒ Something else
You can create or resize partitions yourself, or choose multiple partitions for Ubuntu.

Install

Installation type

sda1 (ntfs)

sda2 (ext4)

sda3 (ntfs)

sda5 (linux-swap)

sda6 (ext4)

sda7 (ext4)

104.9 MB

83.8 GB

83.9 GB

1.0 GB

10.0 GB

2.0 TB

Device	Type	Mount point	Format?	Size	Used	System
/dev/sda						
/dev/sda1	ntfs		<input type="checkbox"/>	104 MB	31 MB	Windows 10
/dev/sda2	ext4	/boot	<input checked="" type="checkbox"/>	83780 MB	12650 MB	
/dev/sda3	ntfs		<input type="checkbox"/>	83886 MB	18112 MB	
/dev/sda5	swap		<input type="checkbox"/>	1023 MB	unknown	
/dev/sda6	ext4	/home	<input checked="" type="checkbox"/>	9999 MB	unknown	
/dev/sda7	ext4	/	<input checked="" type="checkbox"/>	2020223 MB	unknown	

+ -

Change...

Device for boot loader installation:

/dev/sda1 Windows 10

Install

Who are you?

Your name: ✓

Your computer's name: ✓
The name it uses when it talks to other computers.

Pick a username: ✓

Choose a password: Fair password

Confirm your password: ✓

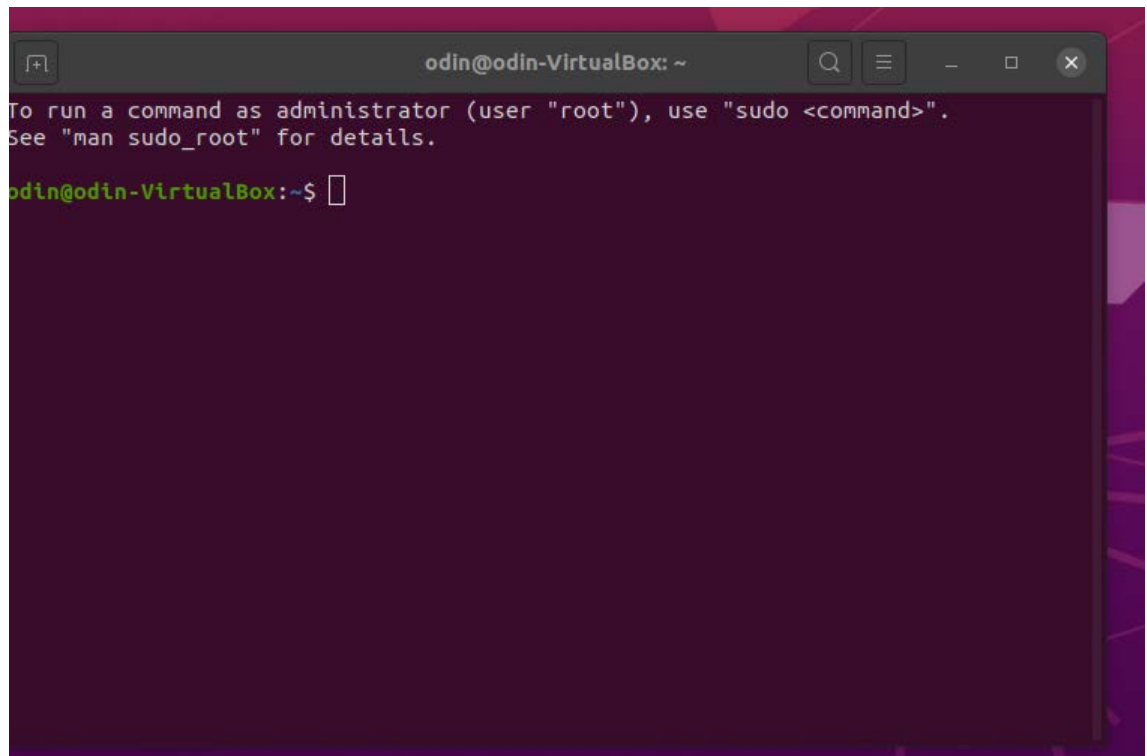
☐ Log in automatically
☒ Require my password to log in

• • • • • • • •

GNU GRUB version 2.04

```
*Ubuntu
Advanced options for Ubuntu
Memory test (memtest86+)
Memory test (memtest86+, serial console 115200)
Windows 10 (on /dev/sda1)
```

Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the commands
before booting or 'c' for a command-line.
The highlighted entry will be executed automatically in 9s.

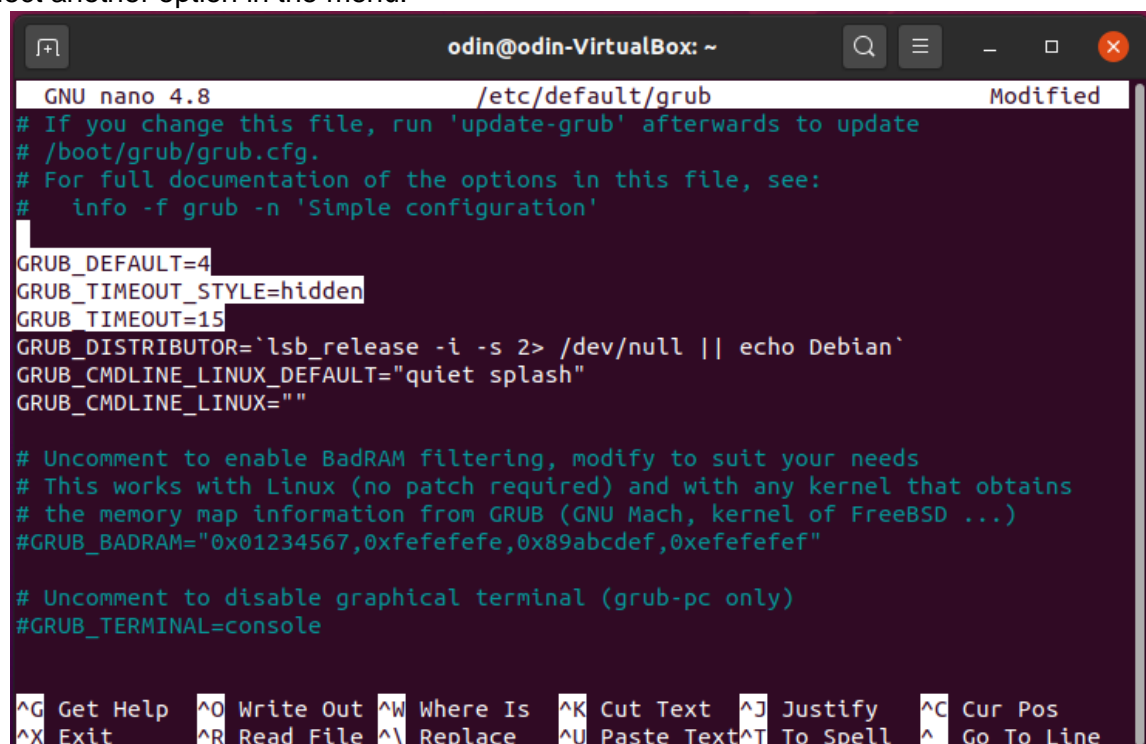


A terminal window titled 'odin@odin-VirtualBox: ~'. It contains the following text: 'To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.' followed by a prompt 'odin@odin-VirtualBox:~\$' and a cursor.

```
odin@odin-VirtualBox: ~
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

odin@odin-VirtualBox:~$
```

- 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 titled 'odin@odin-VirtualBox: ~' showing the nano editor editing the file '/etc/default/grub'. The editor's status bar at the top indicates 'GNU nano 4.8 /etc/default/grub Modified'. 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'

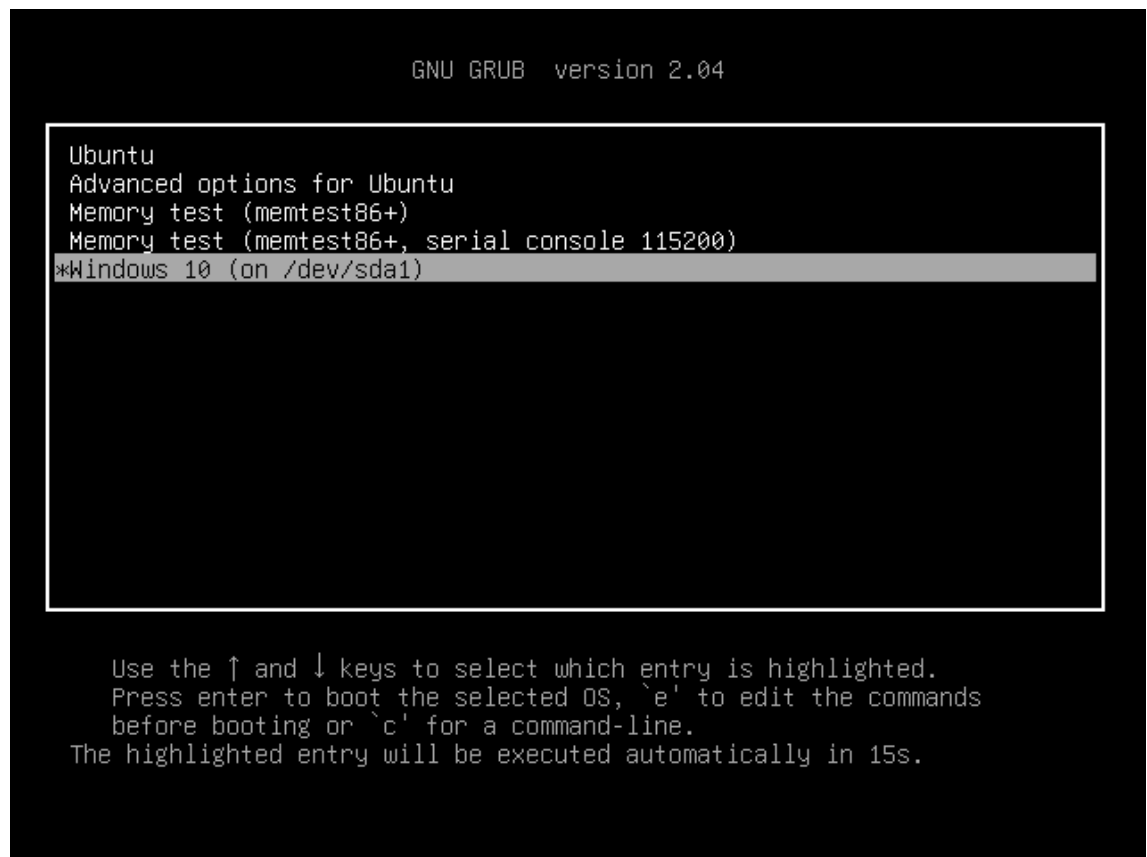
GRUB_DEFAULT=4
GRUB_TIMEOUT_STYLE=hidden
GRUB_TIMEOUT=15
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""

# 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="0x01234567,0xfefefefef,0x89abcdef,0xefefefef"

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

The bottom of the terminal shows the nano editor's command shortcuts:

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



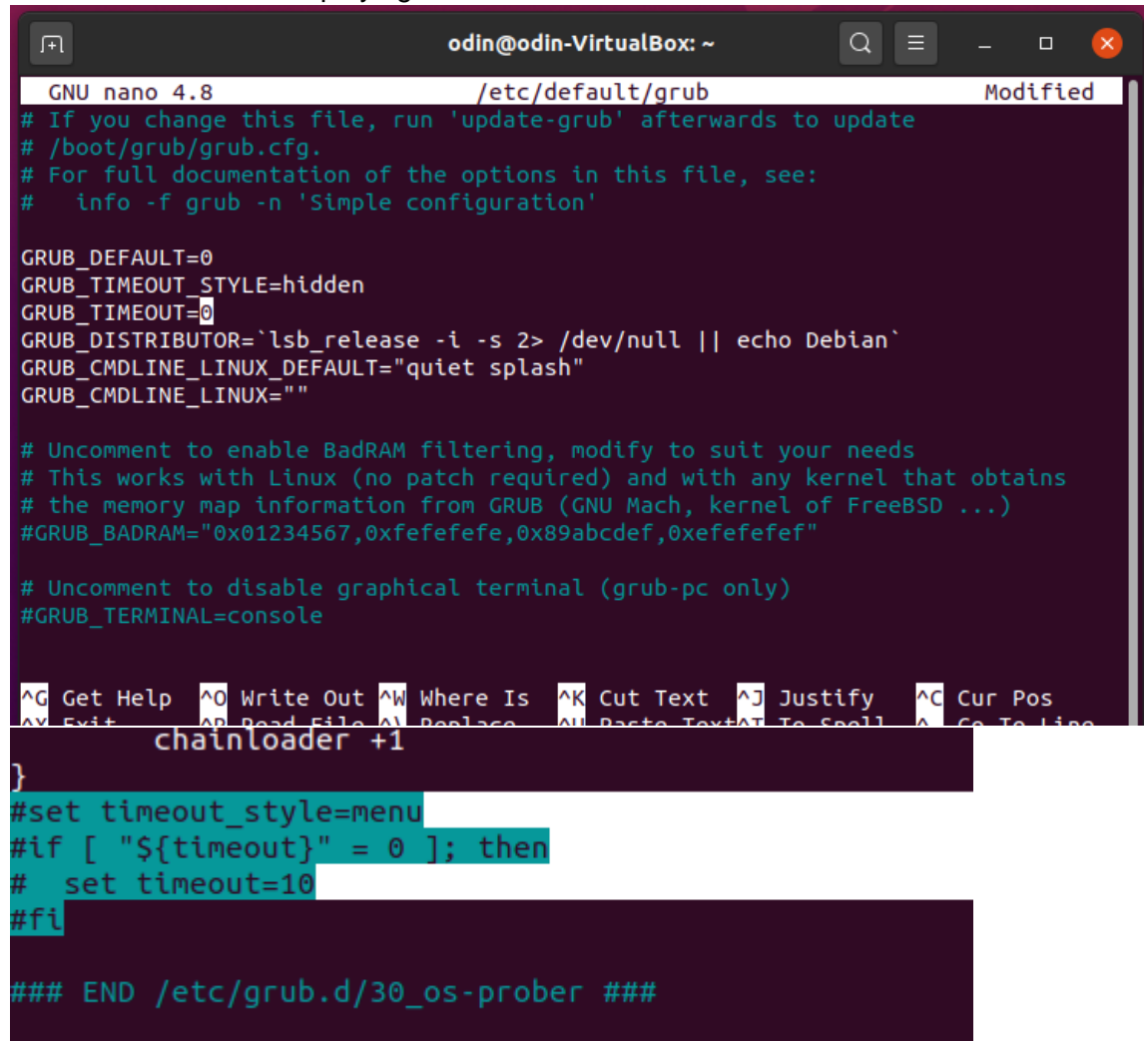
- b. Boot Ubuntu without displaying the menu after showing a 10 seconds countdown.

```
GRUB_DEFAULT=0
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=""
```

```
        chainloader +1
    }
    #set timeout_style=menu
    #if [ "${timeout}" = 0 ]; then
    #    set timeout=10
    #fi

### END /etc/grub.d/30_os-prober ###
```

- c. Boot Ubuntu without displaying the menu.



```
odin@odin-VirtualBox: ~
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="0x01234567,0xfefefefefe,0x89abcdef,0xefefefef"

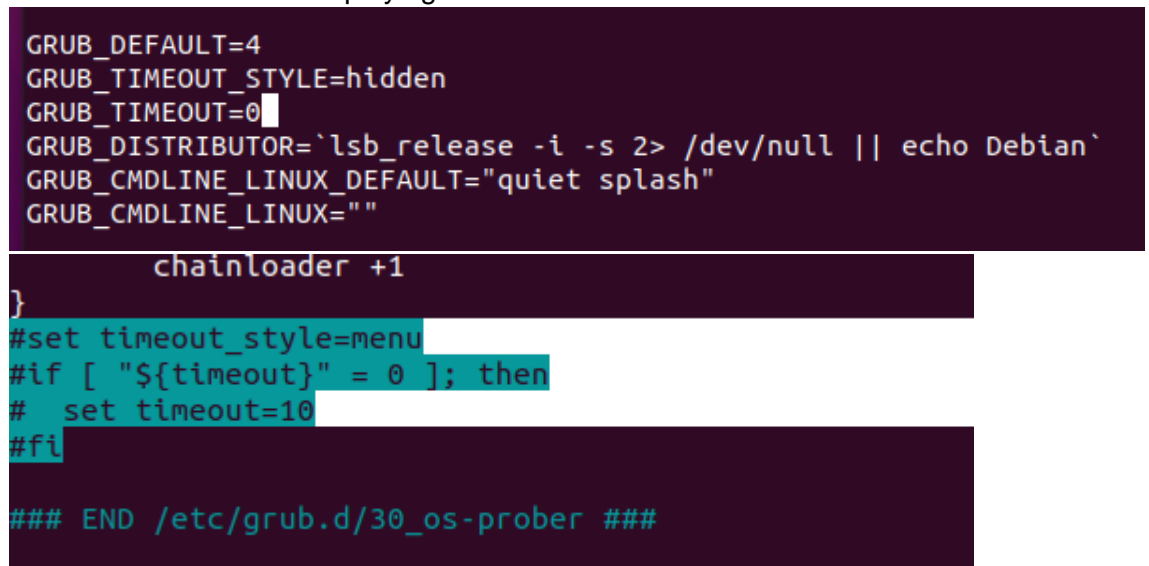
# Uncomment to disable graphical terminal (grub-pc only)
#GRUB_TERMINAL=console

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^Y Exit ^P Read File ^R Replace ^U Paste Text ^T To Spell ^_ Go To Line

chainloader +1
}
#set timeout_style=menu
#if [ "${timeout}" = 0 ]; then
# set timeout=10
#fi

### END /etc/grub.d/30_os-prober ###
```

- d. Boot Windows without displaying the menu.



```
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=""

chainloader +1
}
#set timeout_style=menu
#if [ "${timeout}" = 0 ]; then
# set timeout=10
#fi

### END /etc/grub.d/30_os-prober ###
```

3. If you lose the bootloader in exercise 2, use the tool “Boot-Repair”, which will let you solve the issue. If necessary, use the following the instructions in the URL:

<https://help.ubuntu.com/community/Boot-Repair>