

PASOS PARA INSTALAR DEBIAN EN VIRTUALBOX










Links para descargar el material:

Aca se pueden elegir las imágenes ISO para diferentes arquitecturas:

<http://debian.xfree.com.ar/debian-cd/current/>

Y en este para los procesadores i386:

<http://debian.xfree.com.ar/debian-cd/current/i386/iso-cd>

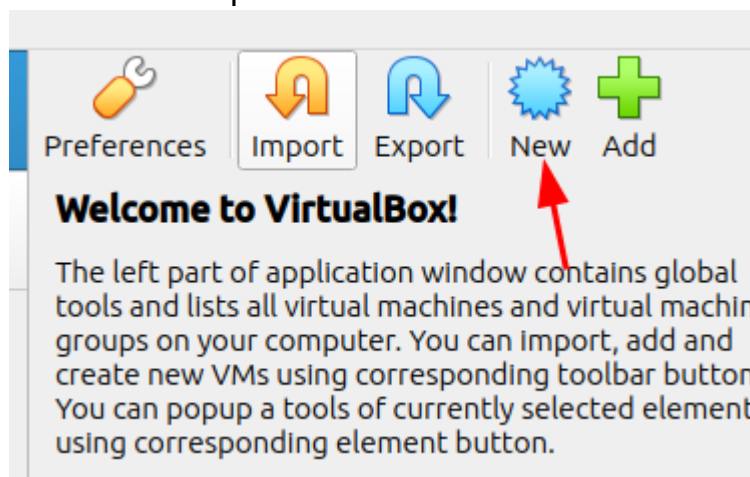
<u>Name</u>	<u>Last modified</u>	<u>Size</u>
 Parent Directory		-
 HEADER.html	2024-06-29 08:58	4.2K
 SHA256SUMS	2024-06-29 17:49	299
 SHA256SUMS.sign	2024-06-29 17:50	833
 SHA512SUMS	2024-06-29 17:49	491
 SHA512SUMS.sign	2024-06-29 17:50	833
 debian-12.6.0-i386-netinst.iso	2024-06-29 08:59	644M
 debian-edu-12.6.0-i386-netinst.iso	2024-06-29 08:59	652M
 debian-mac-12.6.0-i386-netinst.iso	2024-06-29 08:59	644M

Para obtener las imagenes proporcionadas por la catedra:

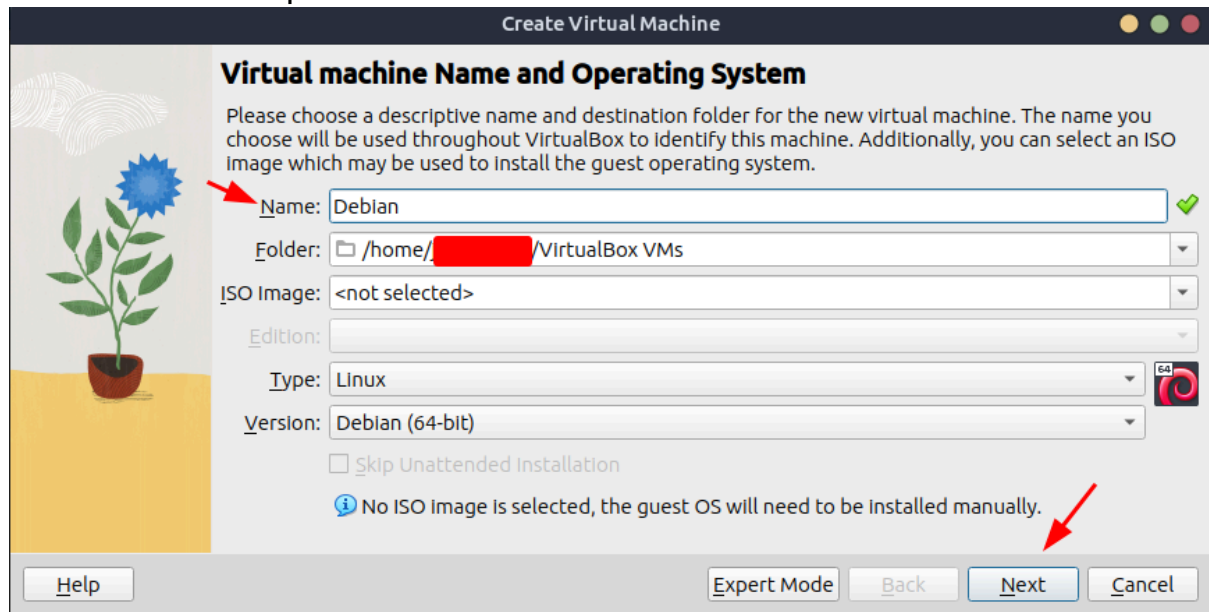
<https://catedras.linti.unlp.edu.ar/course/view.php?id=1238>

Pasos para instalar debian en el sistema:

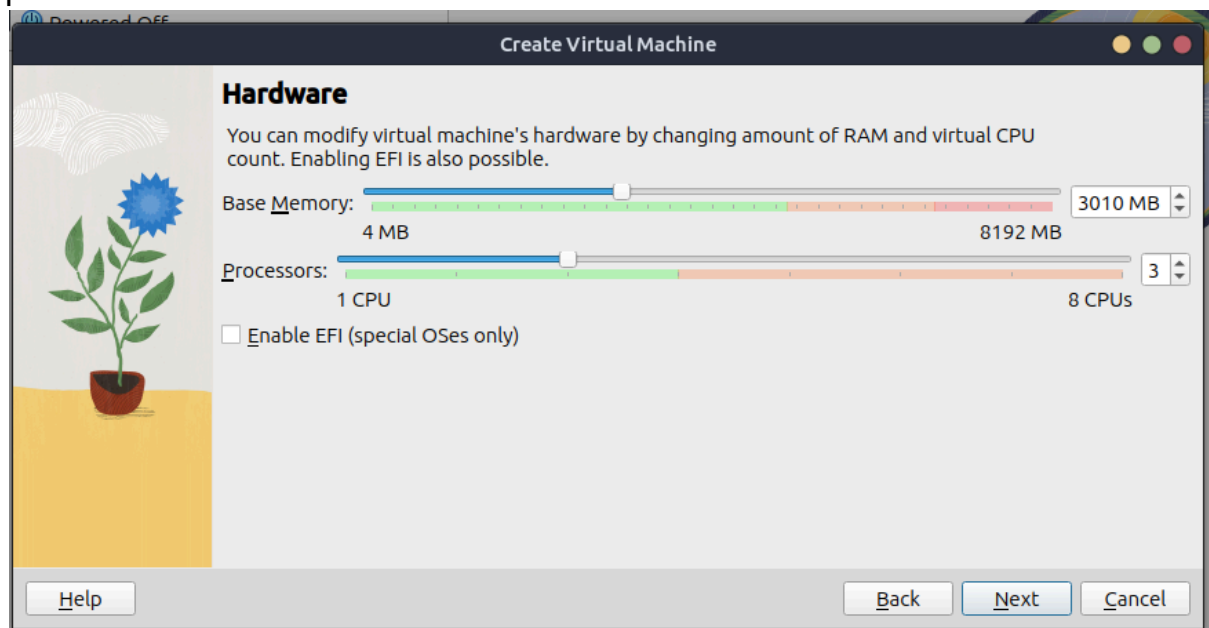
Se crea la maquina virtual.



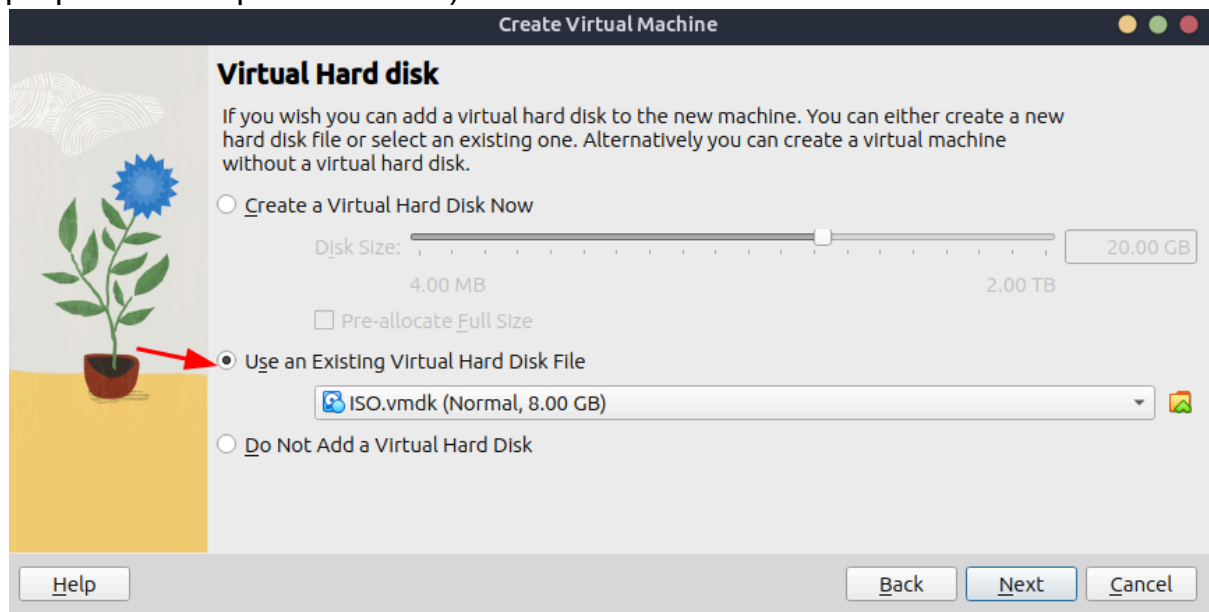
Se Nombra la maquina virtual



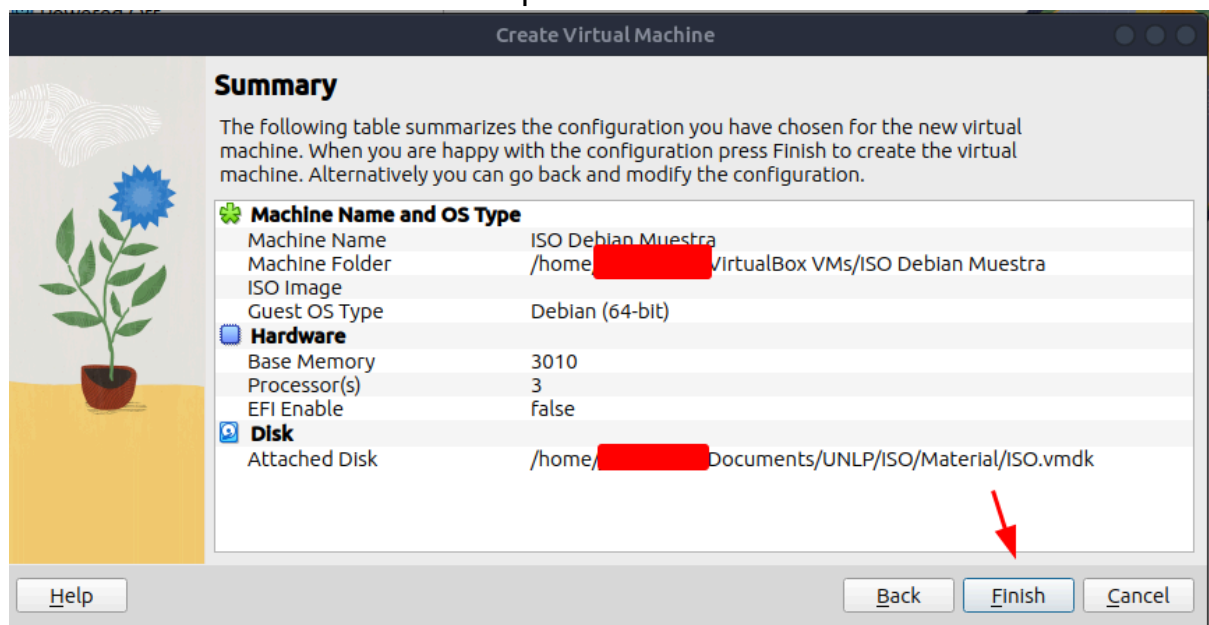
Se le asignan recursos, Cantidad de RAM y Cantidad de núcleos del procesador.



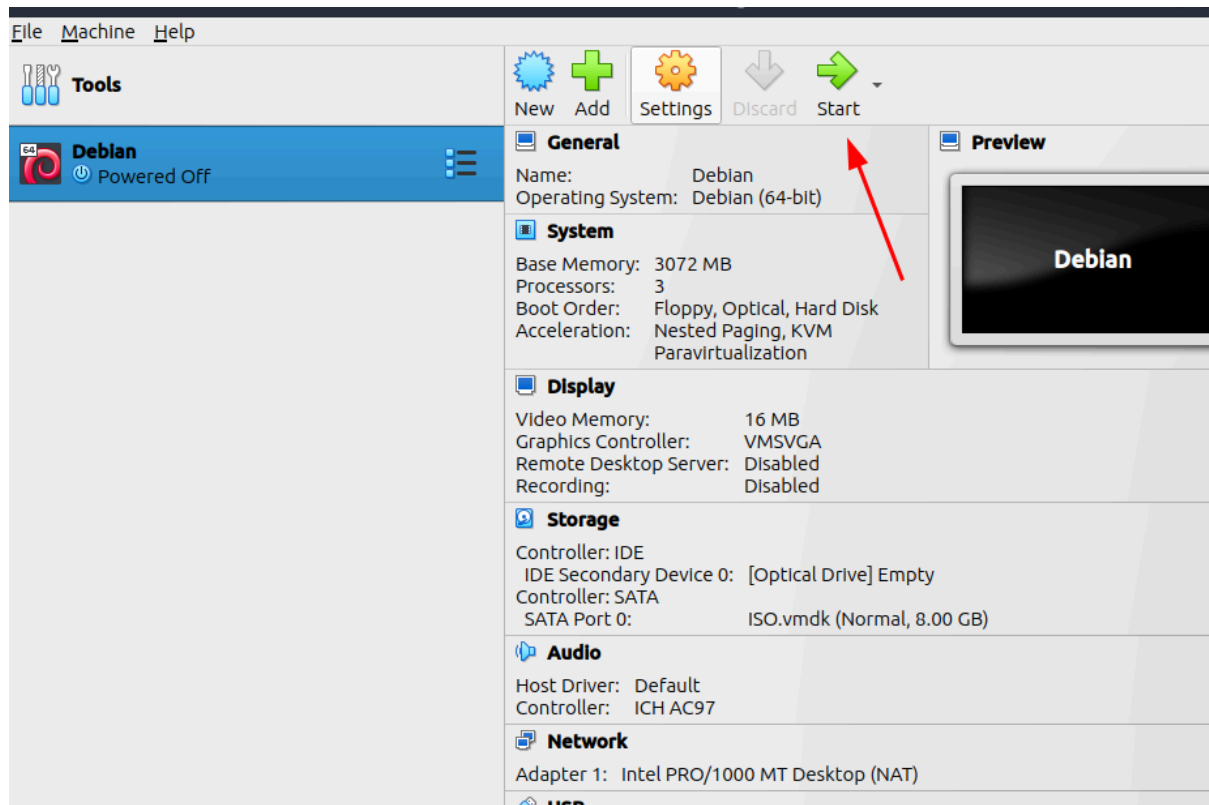
Como vamos a utilizar un HDD virtual ya creado (el archivo .vmdk proporcionado por la catedra) lo seleccionamos



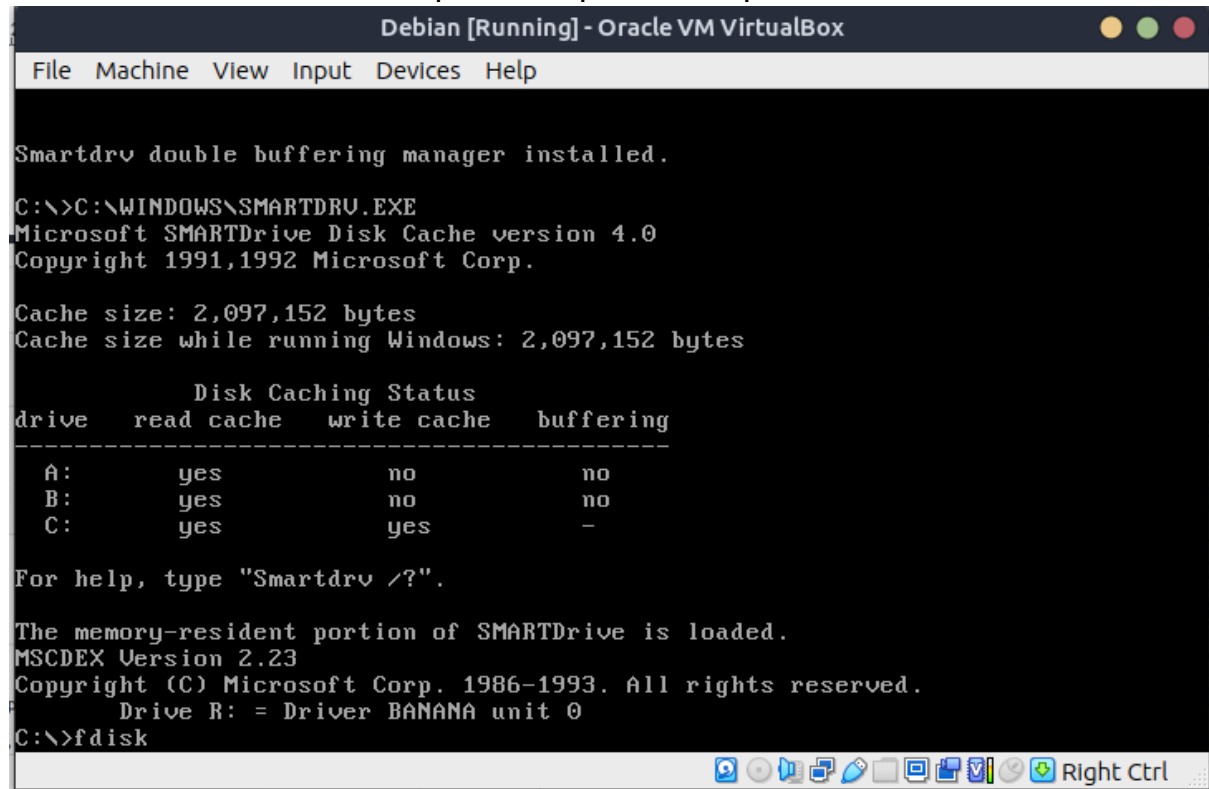
Finalizamos la creación de la maquina virtual



La iniciamos



Usamos el comando "fdisk" para comprobar las particiones



Seleccionamos la opción 4 para ver las particiones del dsco

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
MS-DOS Version 6
Fixed Disk Setup Program
(C)Copyright Microsoft Corp. 1983 - 1993

FDISK Options

Current fixed disk drive: 1

Choose one of the following:

1. Create DOS partition or Logical DOS Drive
2. Set active partition
3. Delete partition or Logical DOS Drive
4. Display partition information

Enter choice: [4]

Press Esc to exit FDISK
```

Observamos que hay una partición de 2047 bytes, esto es debido a que este sistema operativo es de 16 bits por lo que solo puede direccionar 2^{16} cantidad de celdas de memoria.

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

Display Partition Information

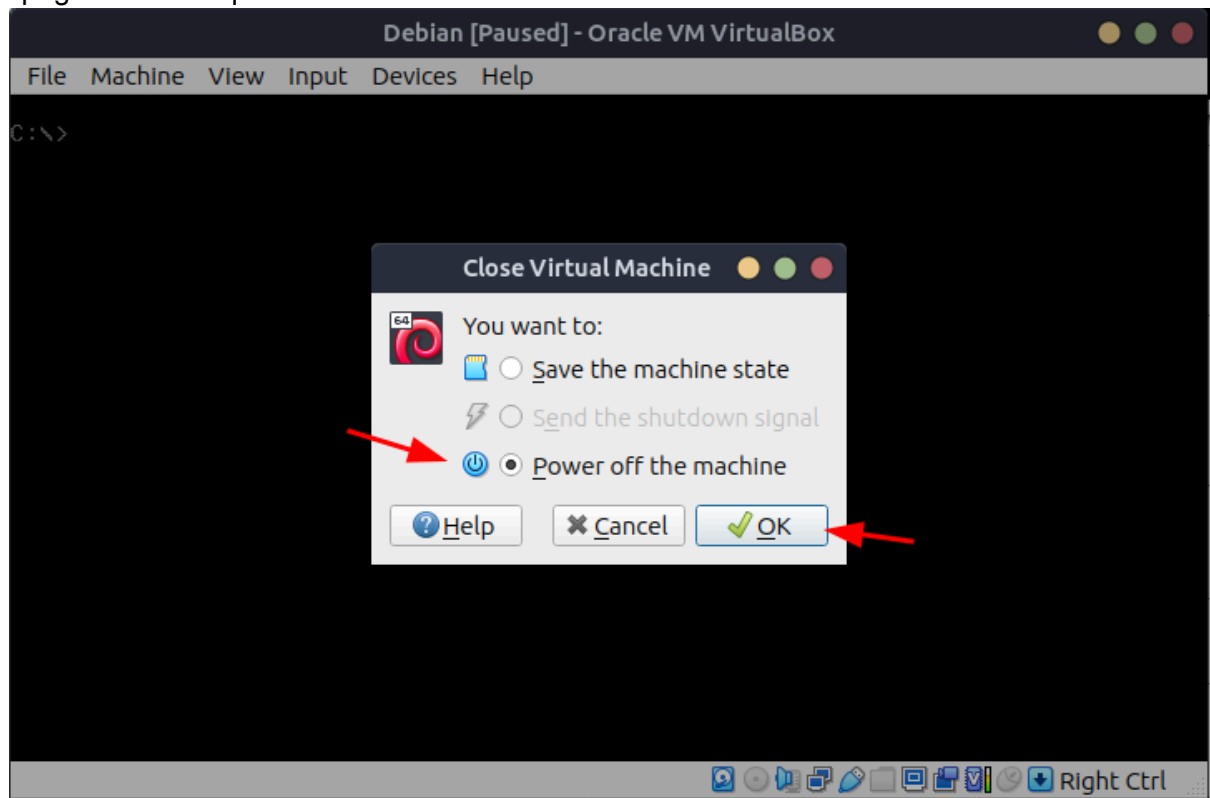
Current fixed disk drive: 1

Partition Status Type Volume Label Mbytes System Usage
C: 1 A PRI DOS UNLP 2047 FAT16 25%

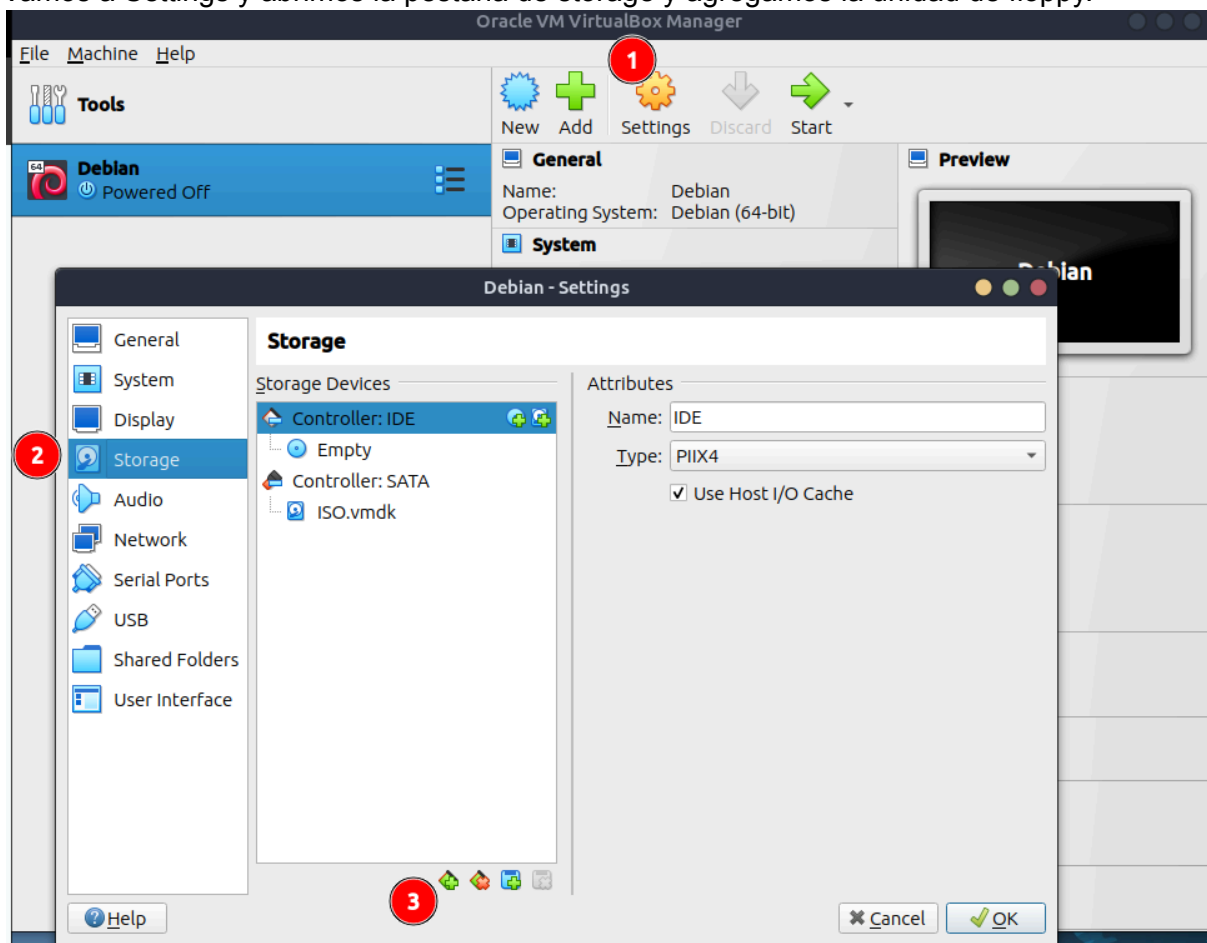
Total disk space is 8033 Mbytes (1 Mbyte = 1048576 bytes)

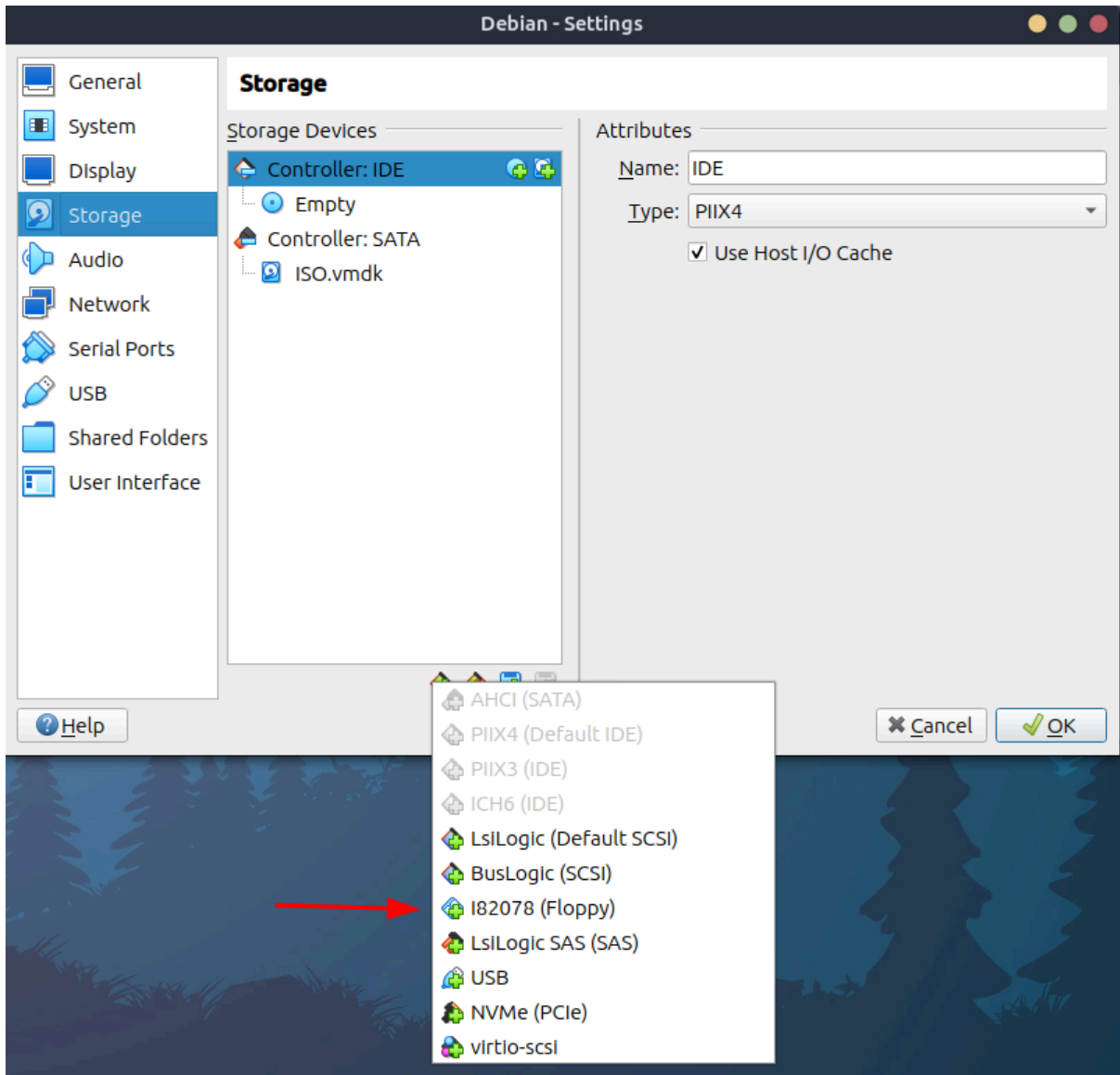
Press Esc to continue
```

apagamos la maquina virtual

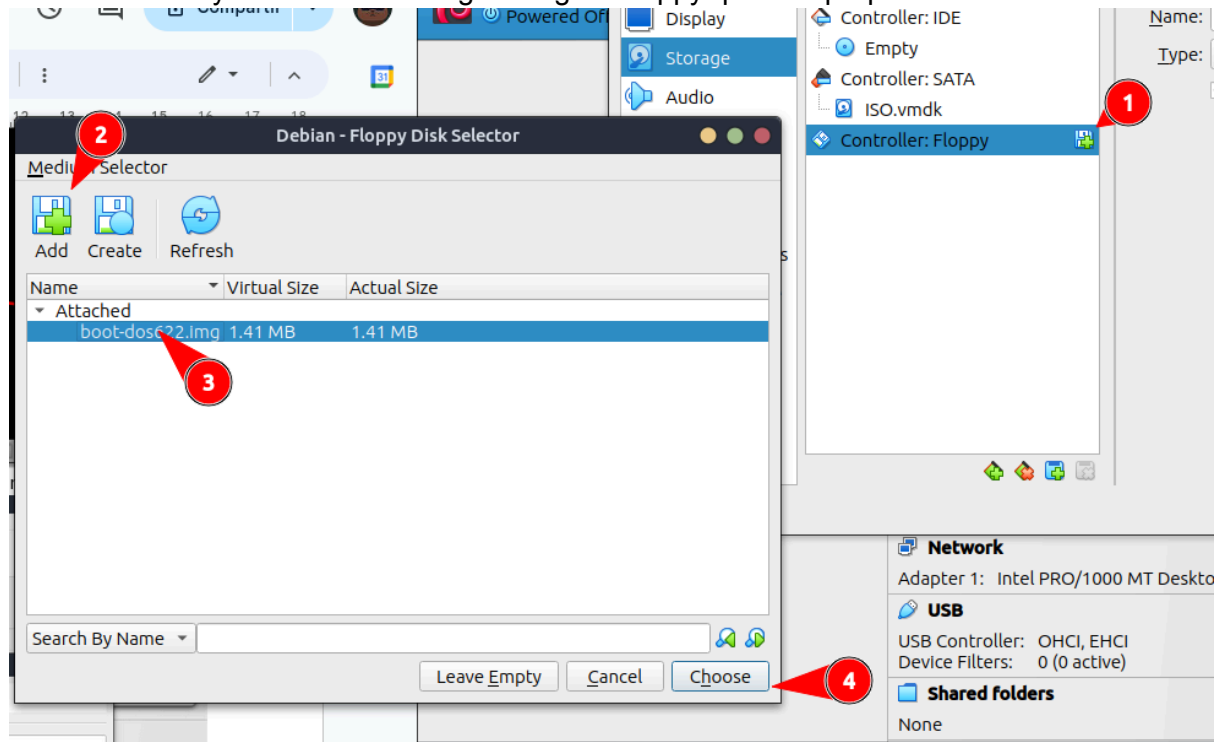


Vamos a Settings y abrimos la pestaña de storage y agregamos la unidad de floppy.

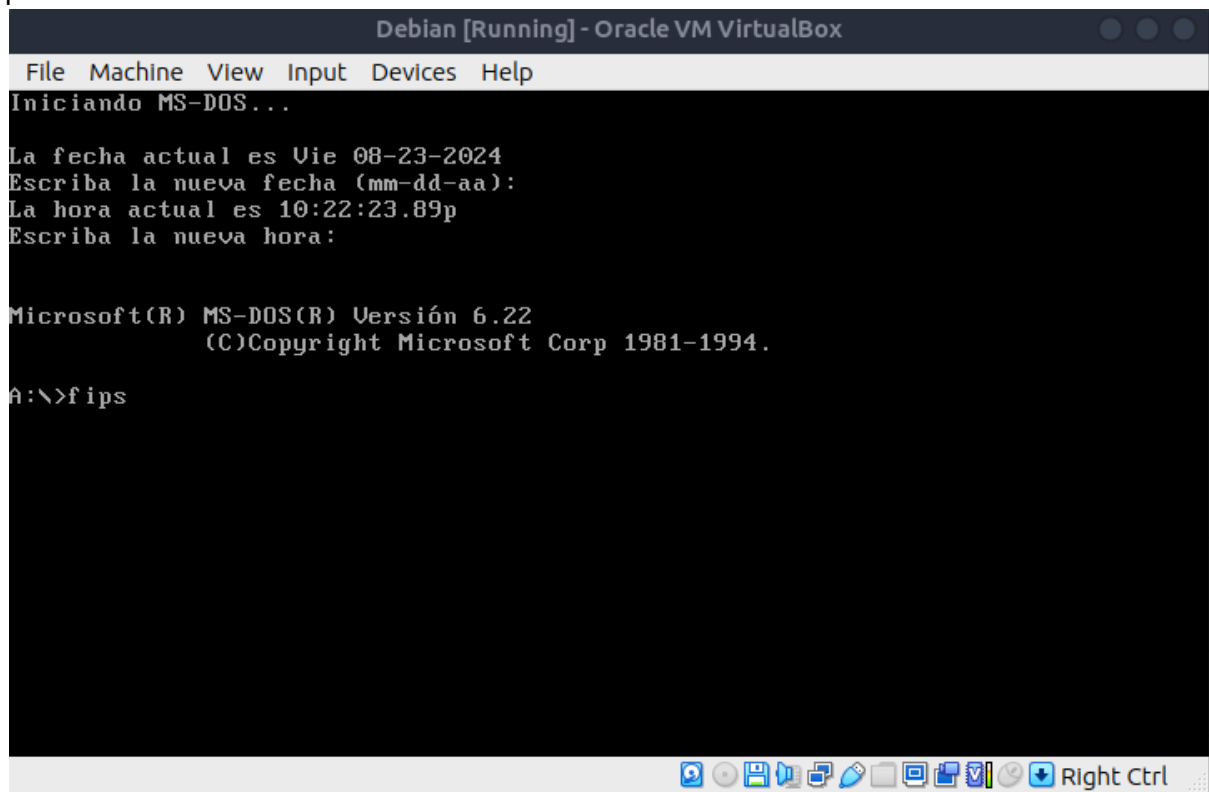




Seleccionamos y montamos la imagen .img del floppy que nos proporciona la catedra



Iniciamos de nuevo la maquina virtual y presionamos dos veces enter para saltarnos la pantalla de la configuración de la fecha y escribimos el comando "fips" para abrir el particionador



Presionamos enter

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
La fecha actual es Vie 08-23-2024
Escriba la nueva fecha (mm-dd-aa):
La hora actual es 10:24:12.26p
Escriba la nueva hora:

Microsoft(R) MS-DOS(R) Versión 6.22
(C)Copyright Microsoft Corp 1981-1994.

A:\>fips

FIPS version 2.0, Copyright (C) 1993/94 Arno Schaefer
FAT32 Support Copyright (C) 1997 Gordon Chaffee

DO NOT use FIPS in a multitasking environment like Windows, OS/2, Desqview,
Novell Task manager or the Linux DOS emulator: boot from a DOS boot disk first.

If you use OS/2 or a disk compressor, read the relevant sections in FIPS.DOC.

FIPS comes with ABSOLUTELY NO WARRANTY, see file COPYING for details
This is free software, and you are welcome to redistribute it
under certain conditions; again see file COPYING for details.

Press any Key
```

de nuevo

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
DO NOT use FIPS in a multitasking environment like Windows, OS/2, Desqview,
Novell Task manager or the Linux DOS emulator: boot from a DOS boot disk first.

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FIPS comes with ABSOLUTELY NO WARRANTY, see file COPYING for details
This is free software, and you are welcome to redistribute it
under certain conditions; again see file COPYING for details.

Press any Key

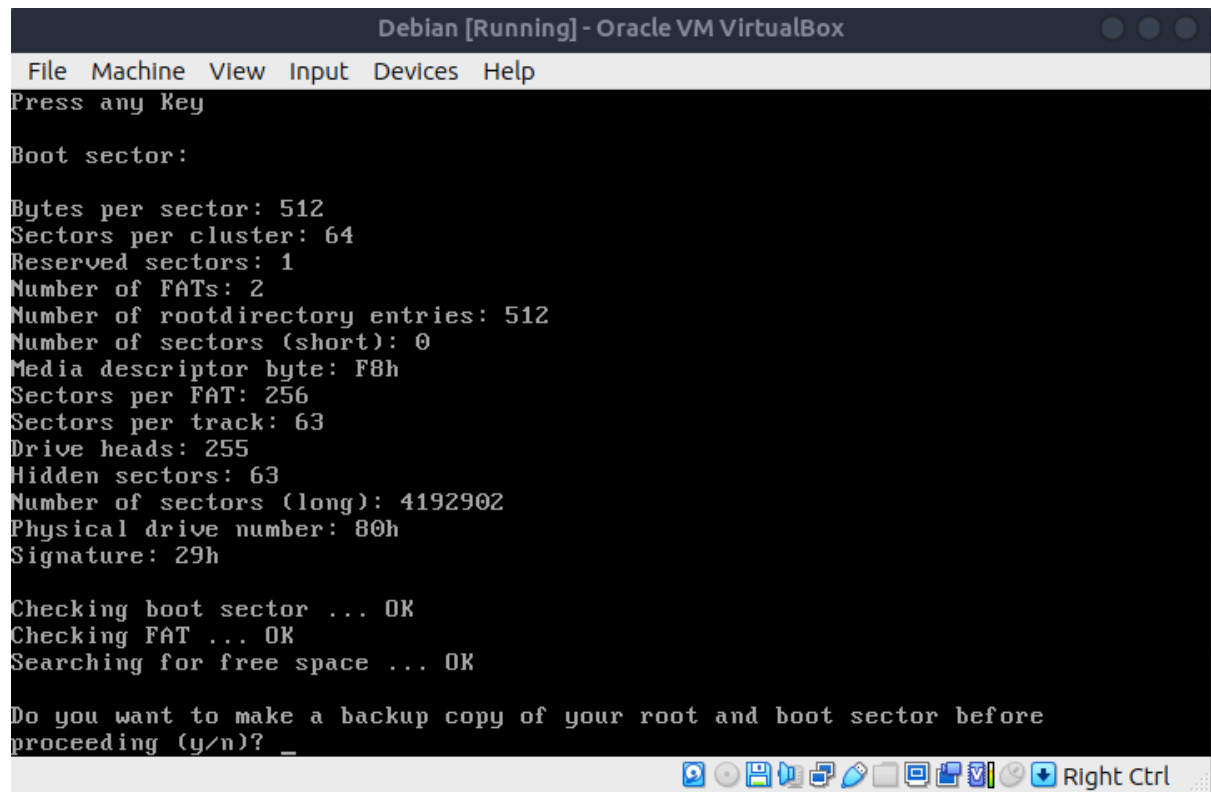
Partition table:

  |      |      |      |      |      |      |      |      |      |      |      |      |
  |bootable|Head|Cyl.|Sector|System|Head|Cyl.|Sector|Start|Sector|Number of|MB|
  |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
1 | yes | 1 | 0 | 1 | 06h | 254 | 260 | 63 | 63 | 4192902 | 2047 |
2 | no | 0 | 0 | 0 | 00h | 0 | 0 | 0 | 0 | 0 | 0 |
3 | no | 0 | 0 | 0 | 00h | 0 | 0 | 0 | 0 | 0 | 0 |
4 | no | 0 | 0 | 0 | 00h | 0 | 0 | 0 | 0 | 0 | 0 |

Checking root sector ... OK

Press any Key
```

Presionaos "n"



The screenshot shows a terminal window titled "Debian [Running] - Oracle VM VirtualBox". The terminal output displays disk partitioning statistics and progress. At the bottom, it asks "Do you want to make a backup copy of your root and boot sector before proceeding (y/n)? _". The window has a menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". A toolbar at the bottom includes icons for various functions and a "Right Ctrl" button.

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Press any Key

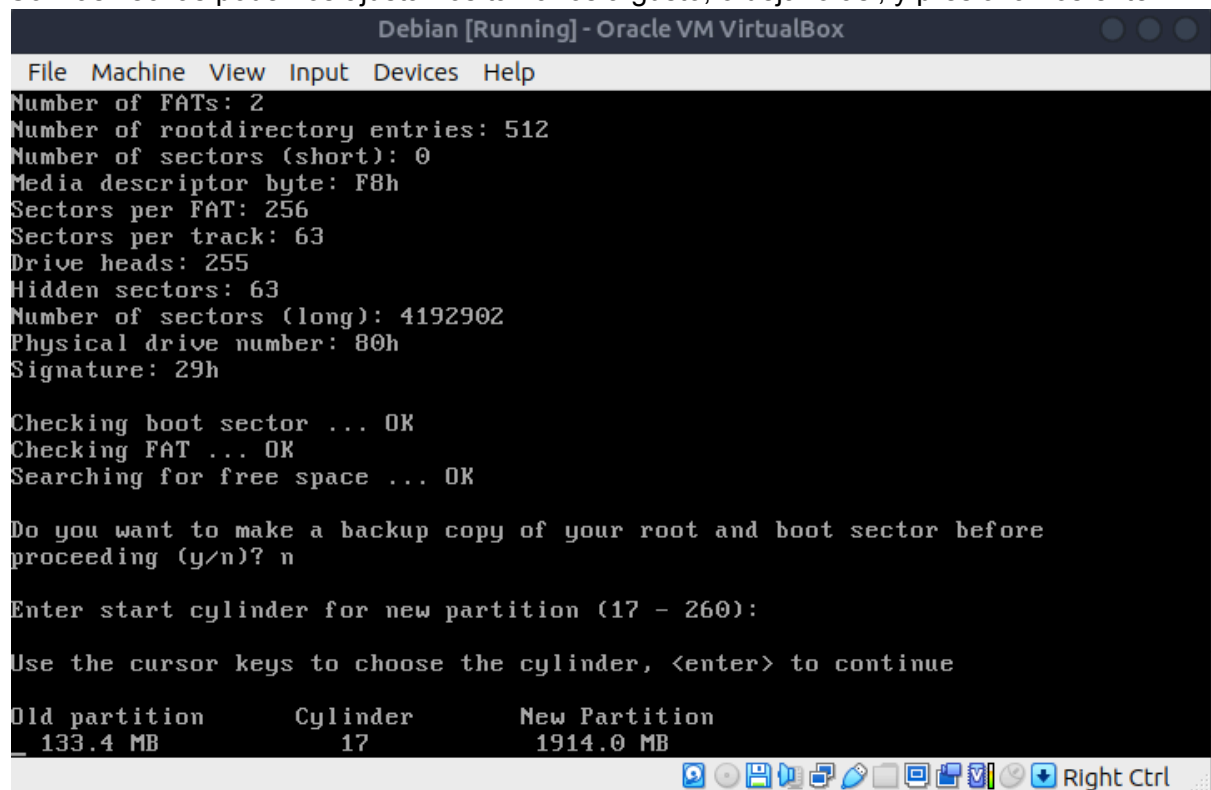
Boot sector:

Bytes per sector: 512
Sectors per cluster: 64
Reserved sectors: 1
Number of FATs: 2
Number of rootdirectory entries: 512
Number of sectors (short): 0
Media descriptor byte: F8h
Sectors per FAT: 256
Sectors per track: 63
Drive heads: 255
Hidden sectors: 63
Number of sectors (long): 4192902
Physical drive number: 80h
Signature: 29h

Checking boot sector ... OK
Checking FAT ... OK
Searching for free space ... OK

Do you want to make a backup copy of your root and boot sector before
proceeding (y/n)? _
```

Con las flechas podemos ajustar los tamaños a gusto, o dejarlo asi, y presionamos enter



The screenshot shows the same terminal window, but now it prompts for a start cylinder: "Enter start cylinder for new partition (17 - 260):". Below this, it says "Use the cursor keys to choose the cylinder, <enter> to continue". A table shows the current partitioning state: "Old partition" is 133.4 MB, "Cylinder" is 17, and "New Partition" is 1914.0 MB. The window's menu bar and toolbar are identical to the previous screenshot.

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

Number of FATs: 2
Number of rootdirectory entries: 512
Number of sectors (short): 0
Media descriptor byte: F8h
Sectors per FAT: 256
Sectors per track: 63
Drive heads: 255
Hidden sectors: 63
Number of sectors (long): 4192902
Physical drive number: 80h
Signature: 29h

Checking boot sector ... OK
Checking FAT ... OK
Searching for free space ... OK

Do you want to make a backup copy of your root and boot sector before
proceeding (y/n)? n

Enter start cylinder for new partition (17 - 260):

Use the cursor keys to choose the cylinder, <enter> to continue

Old partition      Cylinder      New Partition
_ 133.4 MB         17           1914.0 MB
```

Presionamos "c" para continuar

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Enter start cylinder for new partition (17 - 260):

Use the cursor keys to choose the cylinder, <enter> to continue

Old partition      Cylinder      New Partition
133.4 MB           17           1914.0 MB

First Cluster: 4259
Last Cluster: 65506

Testing if empty ... OK

New partition table:

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|Part.|bootable|Head|Cyl.|Sector|System|Head|Cyl.|Sector|Start Sector|Number of Sectors|MB|
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1|      |yes|  1|  0|    1|06h|254| 16|   63|      63|    273042|133|
2|      |no|  0| 17|    1|06h|254|260|   63|    273105|    3919860|1913|
3|      |no|  0|  0|    0|00h|  0|  0|    0|      0|         0|  0|
4|      |no|  0|  0|    0|00h|  0|  0|    0|      0|         0|  0|

Checking root sector ... OK

Do you want to continue or reedit the partition table (c/r)?
```

presionamos "y" y cerramos la maquina virtual

```
Debian [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Checking root sector ... OK

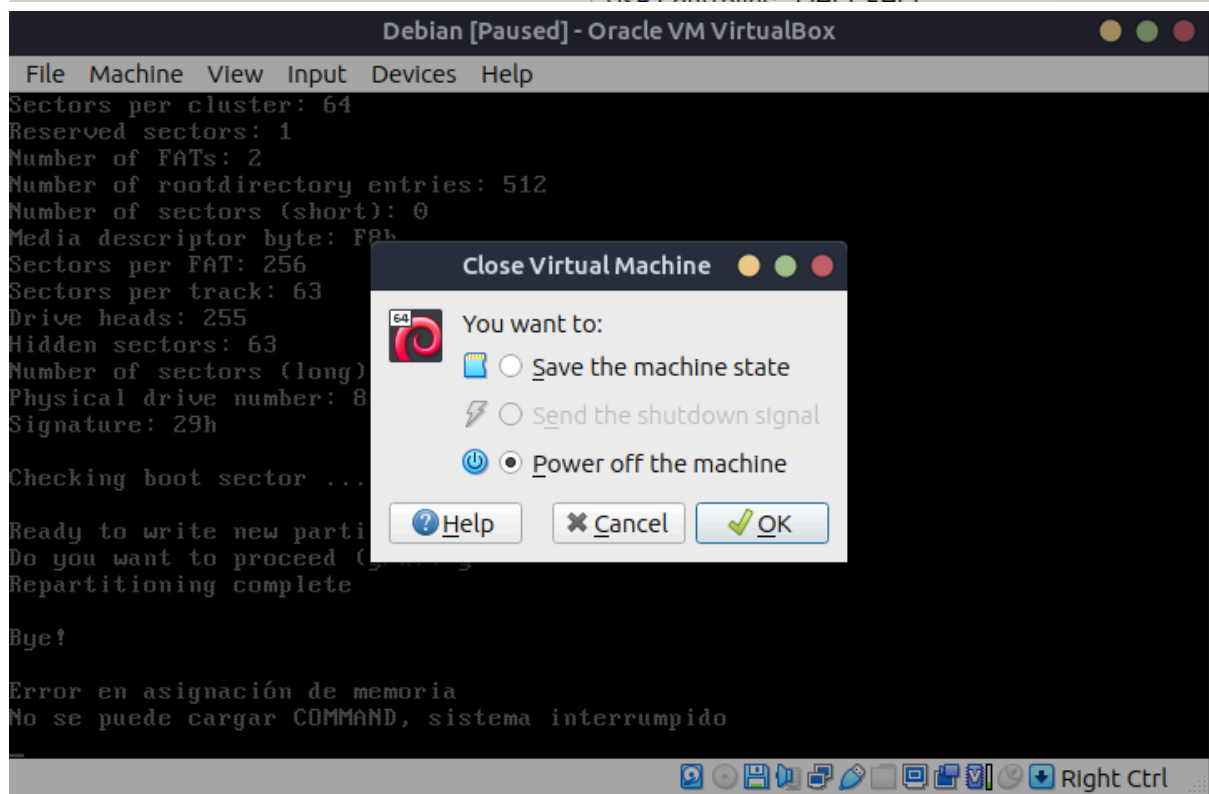
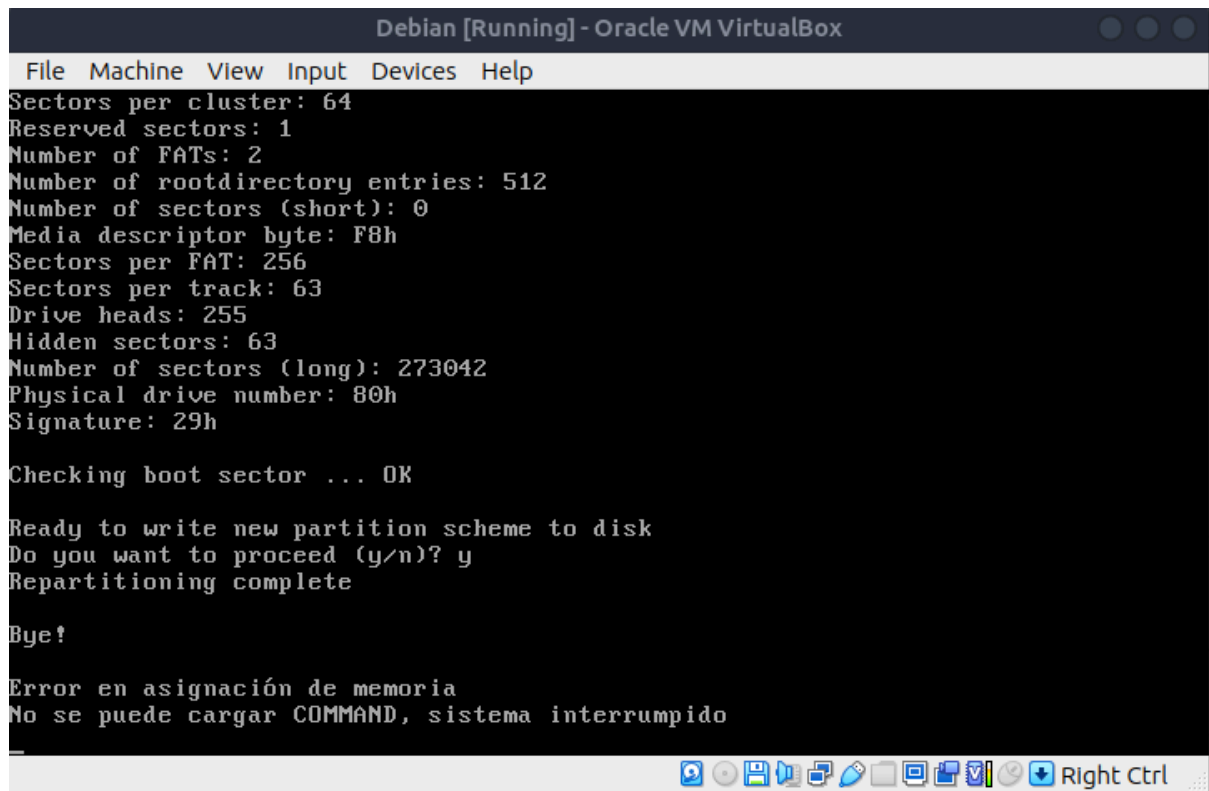
Do you want to continue or reedit the partition table (c/r)? c

New boot sector:

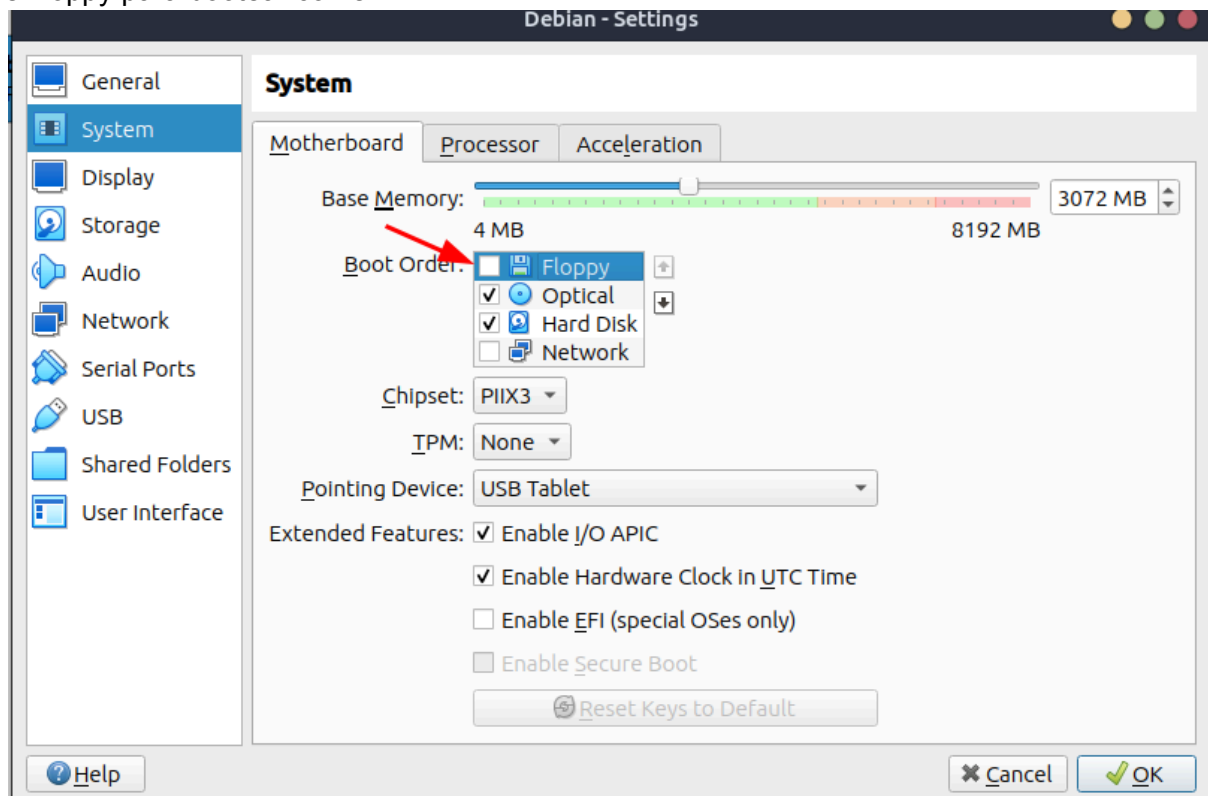
Bytes per sector: 512
Sectors per cluster: 64
Reserved sectors: 1
Number of FATs: 2
Number of rootdirectory entries: 512
Number of sectors (short): 0
Media descriptor byte: F8h
Sectors per FAT: 256
Sectors per track: 63
Drive heads: 255
Hidden sectors: 63
Number of sectors (long): 273042
Physical drive number: 80h
Signature: 29h

Checking boot sector ... OK

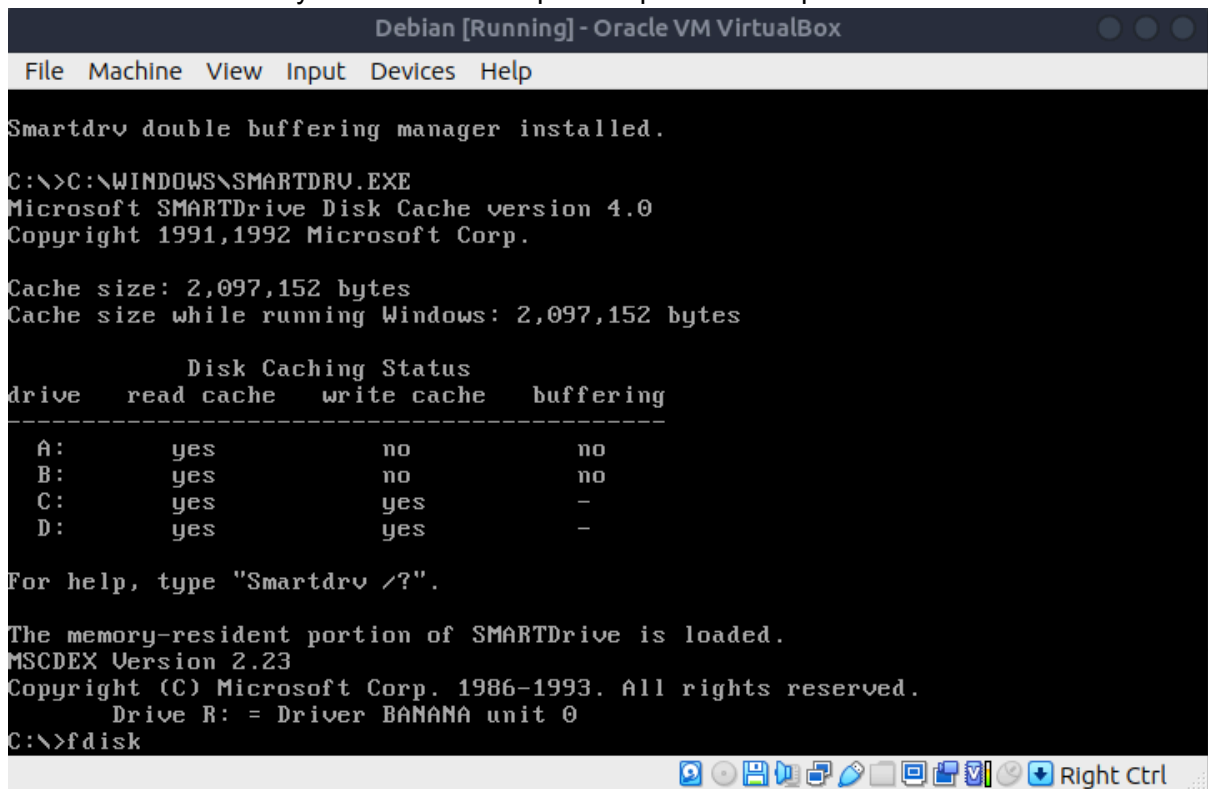
Ready to write new partition scheme to disk
Do you want to proceed (y/n)?
```

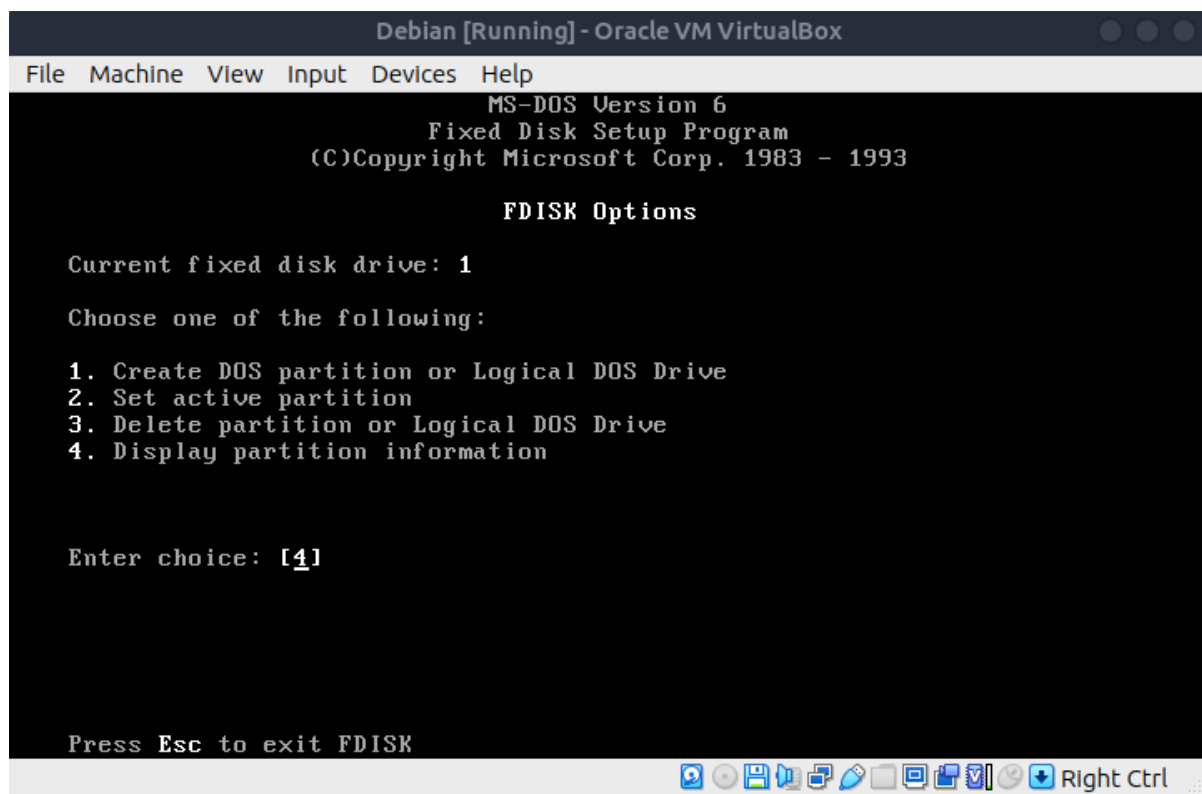


Volvemos a abrir Settings en nuestra maquina virtual y en la pestaña System desactivamos el floppy para bootear con el HDD

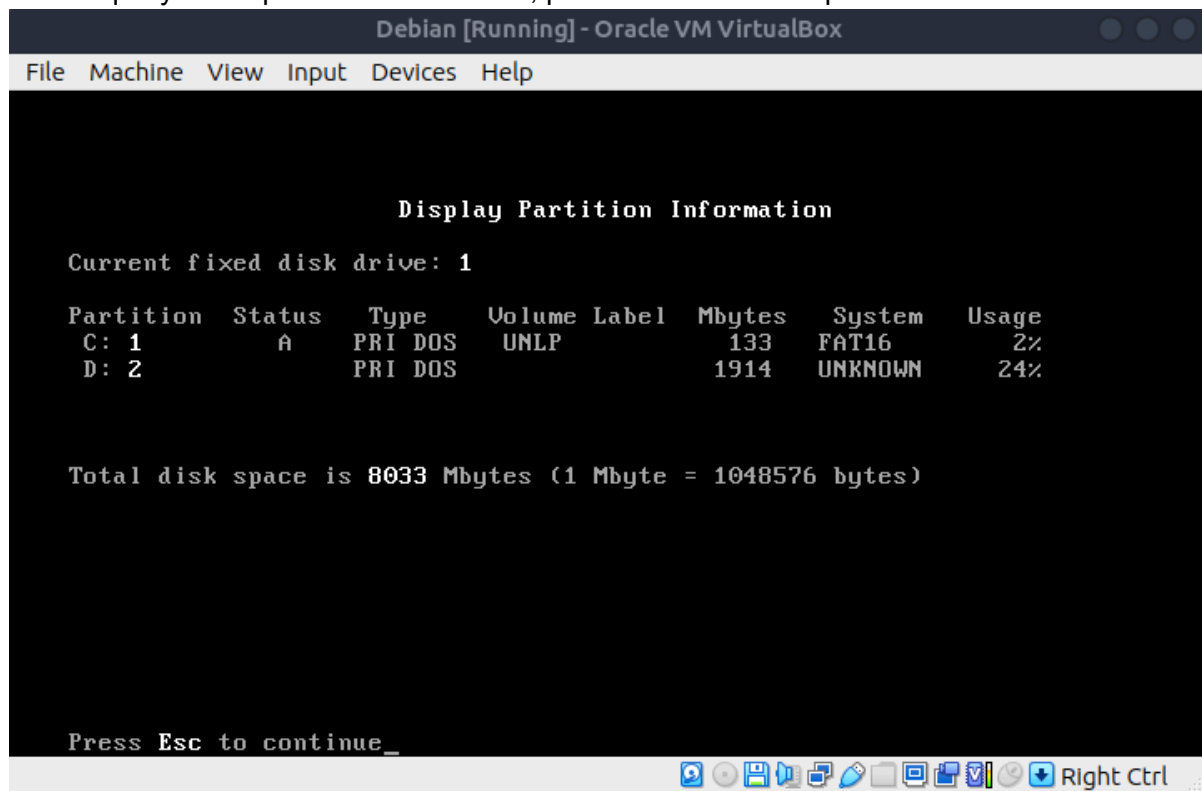


volvemos a abrir fdisk y entramos en la opcion 4 para ver las particiones

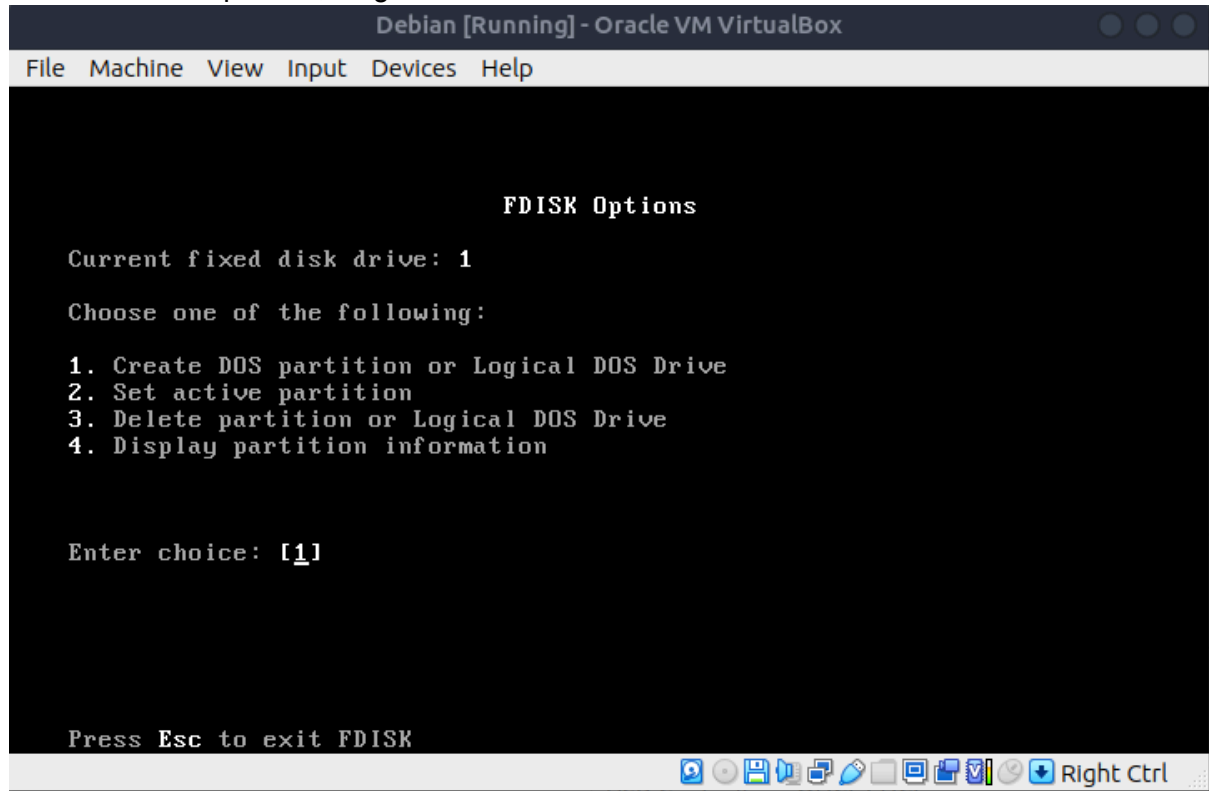




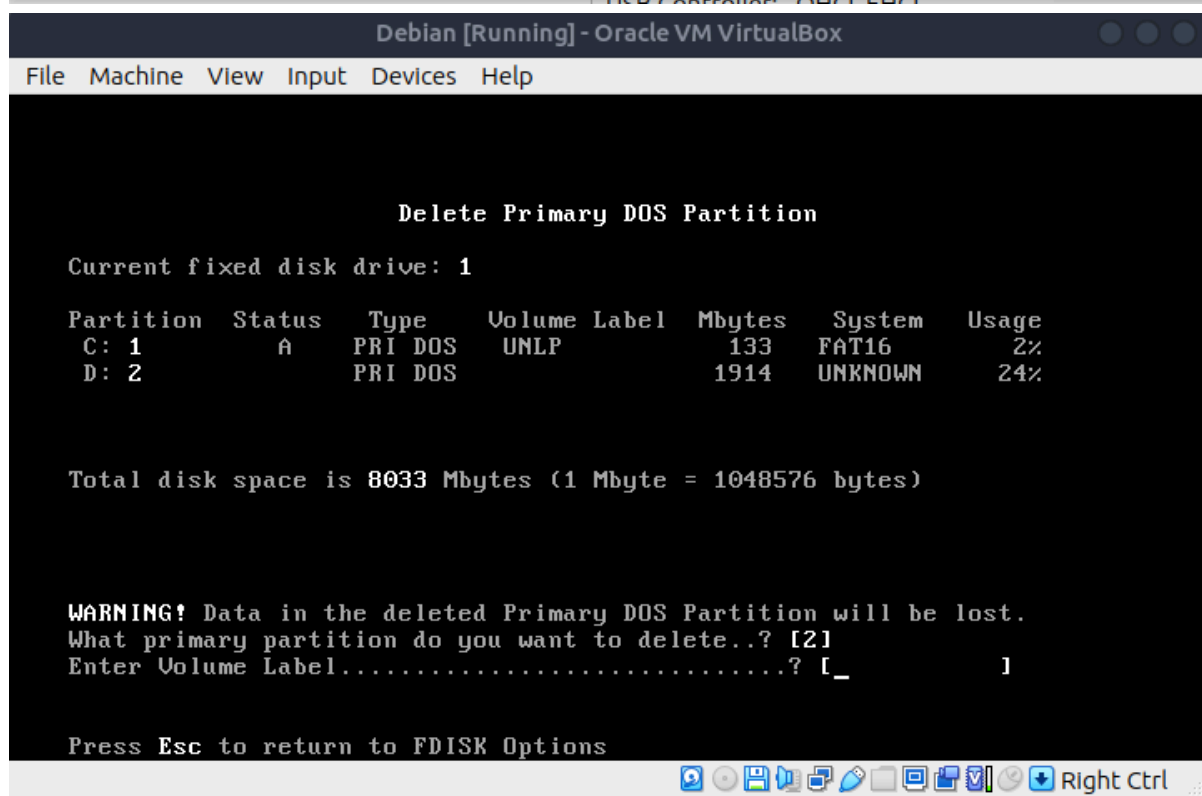
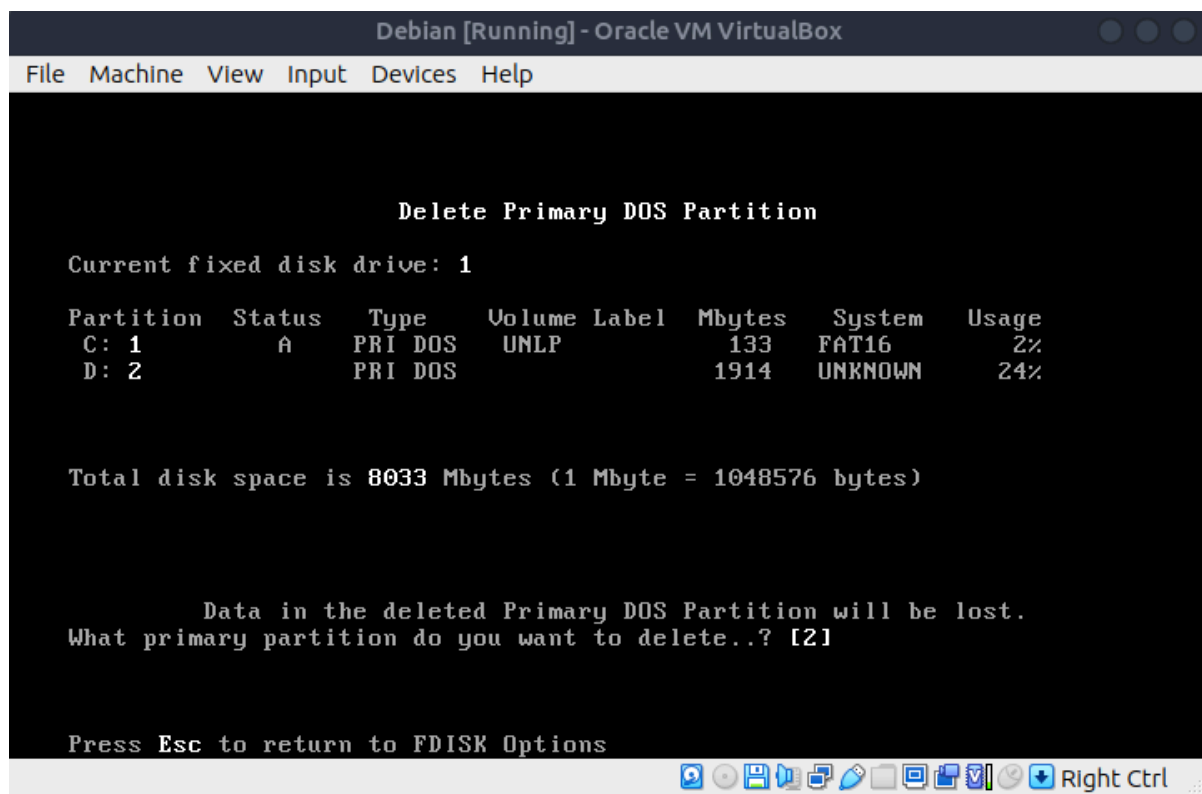
Vemos que ya esta particionado el disco, podemos eliminar la particion 2



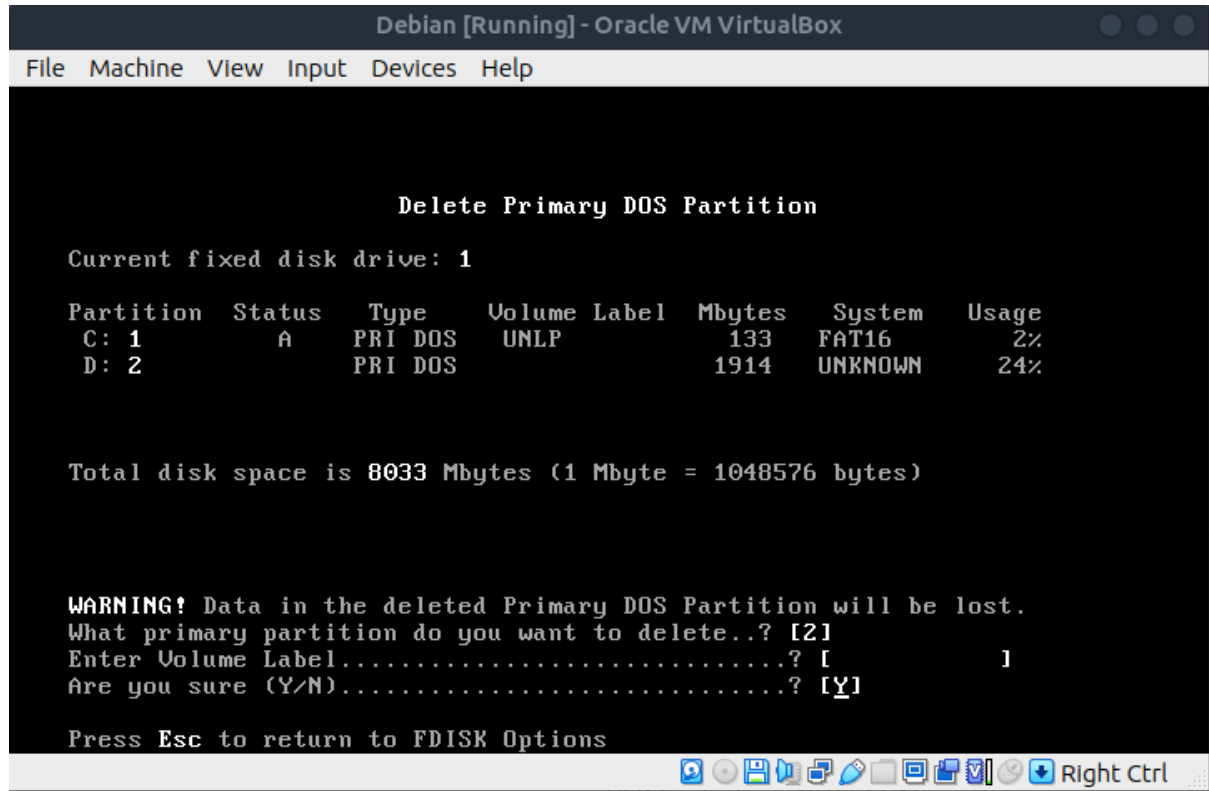
entramos en la opcion 3, luego en la 1



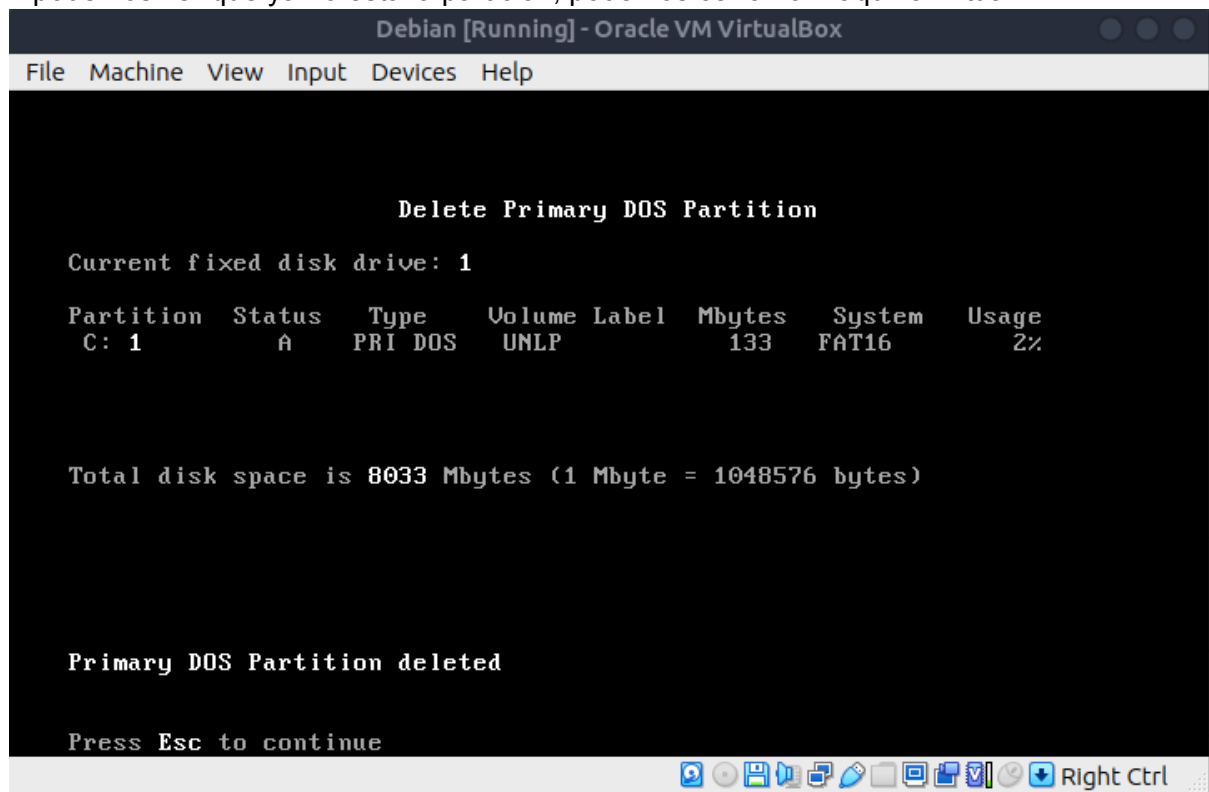
y seleccionamos la particion 2 y presioamos enter, y enter de nuevo



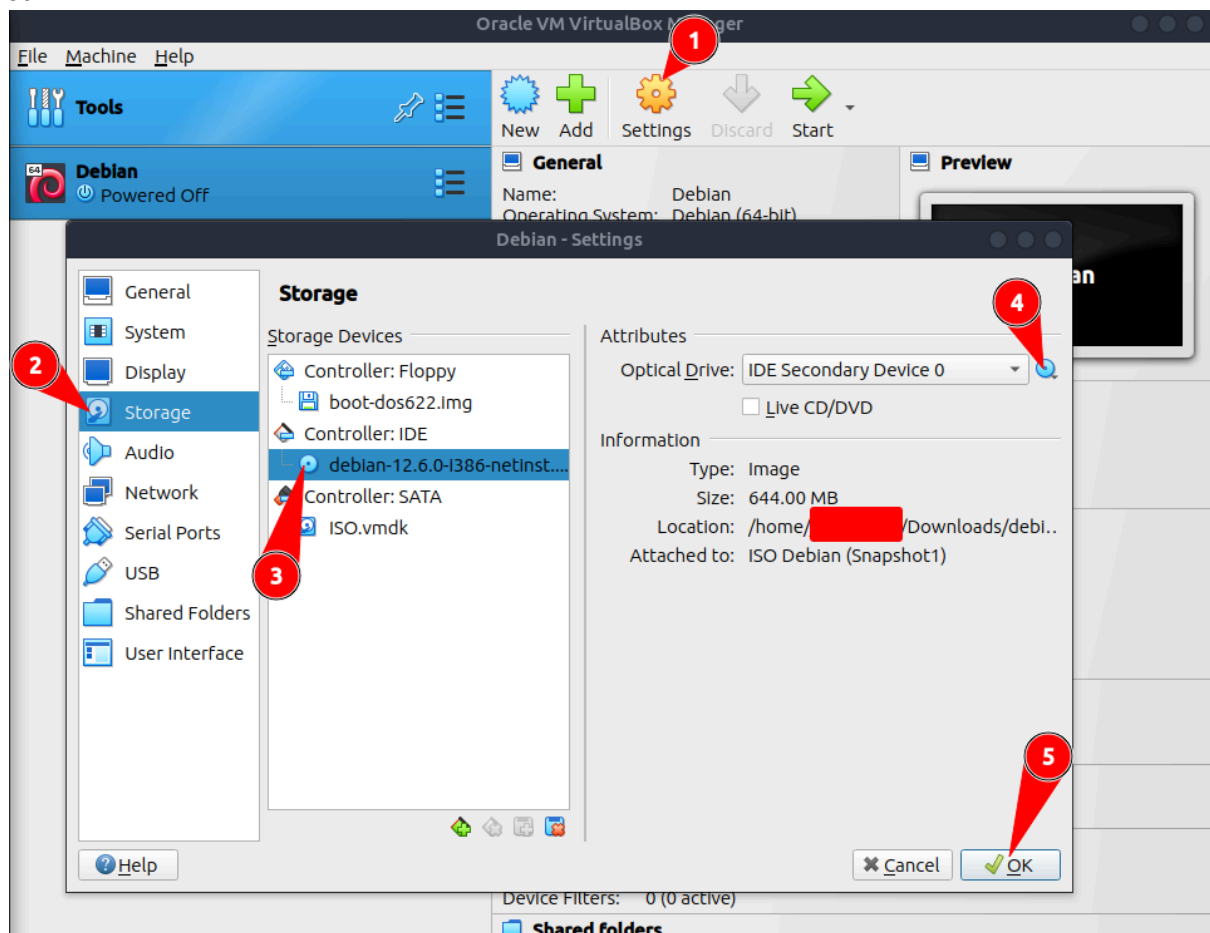
Presionamos Y



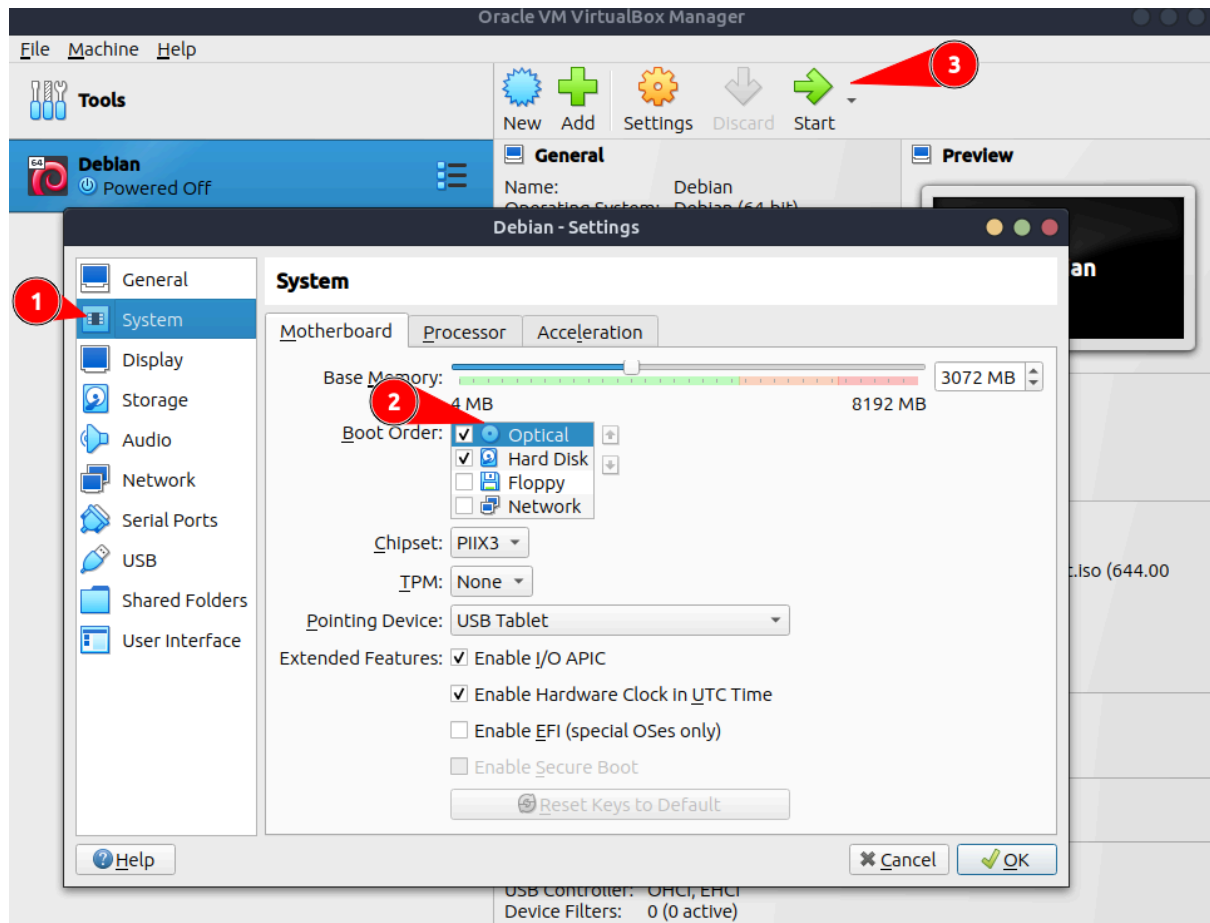
Y podemos ver que ya no esta la particion, podemos cerrar la maquina virtual.



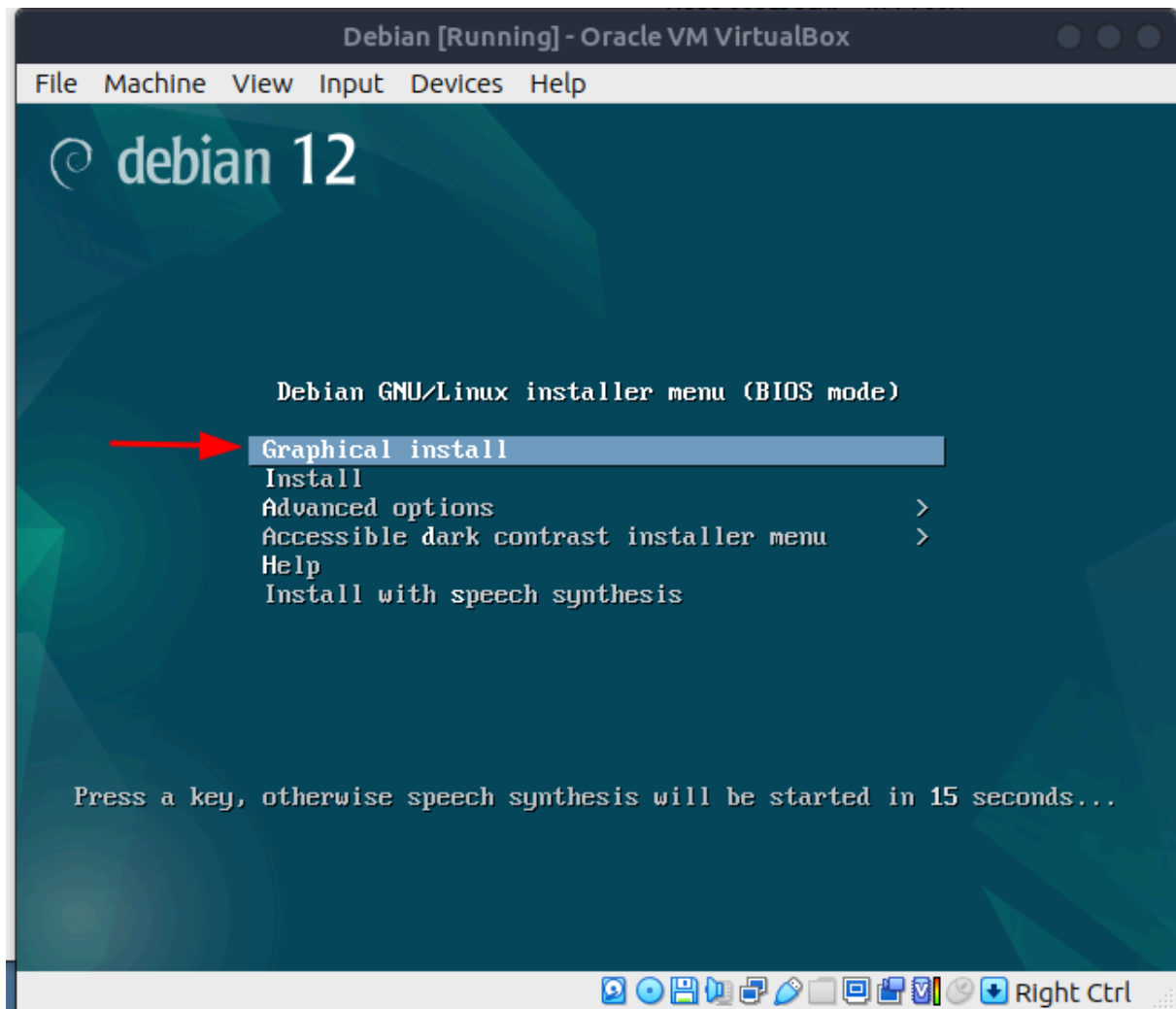
Luego montamos la imagen que descargamos de Debian que descargamos en el lector de cd



nos aseguramos que la unidad de cd tenga mas prioridad que la HDD antes de iniciar de nuevo la maquina virtual



Iniciamos la instalación de Debian, voy a usar la interfaz grafica



Continuar...