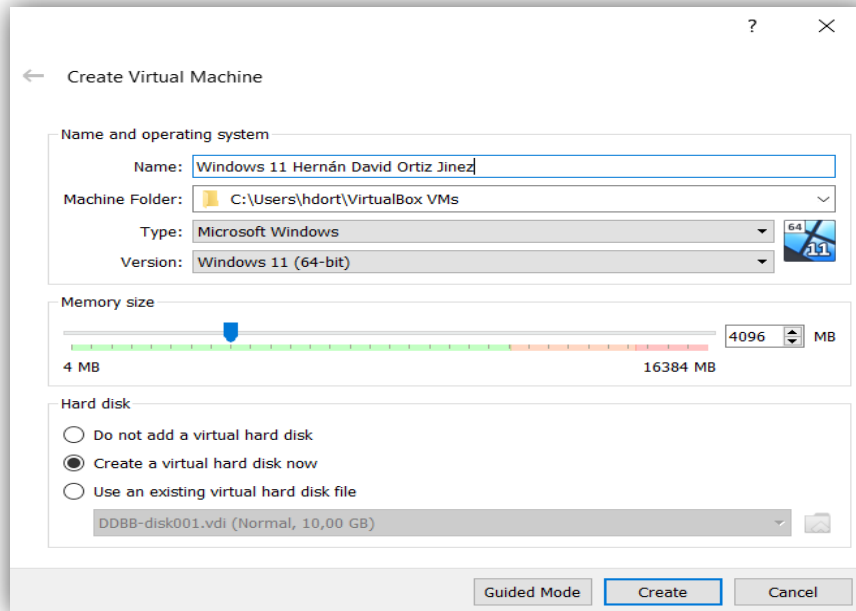
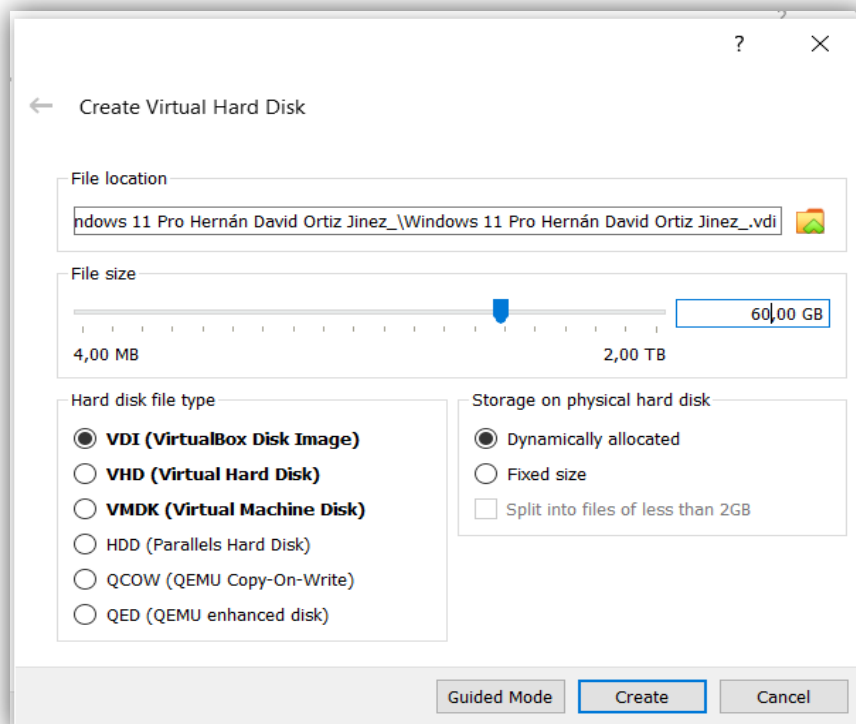


**Explanation, of how to install windows 11 on a virtual machine:**

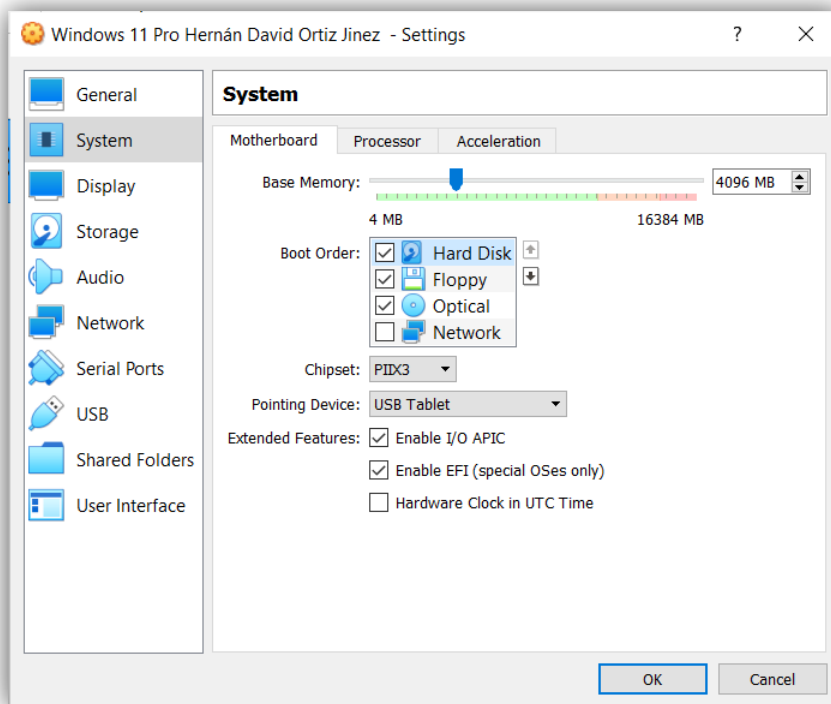
First of all, we need to set the previous requirements that windows 11 needs, for this proposal, assign a minimum of 4GB of memory.



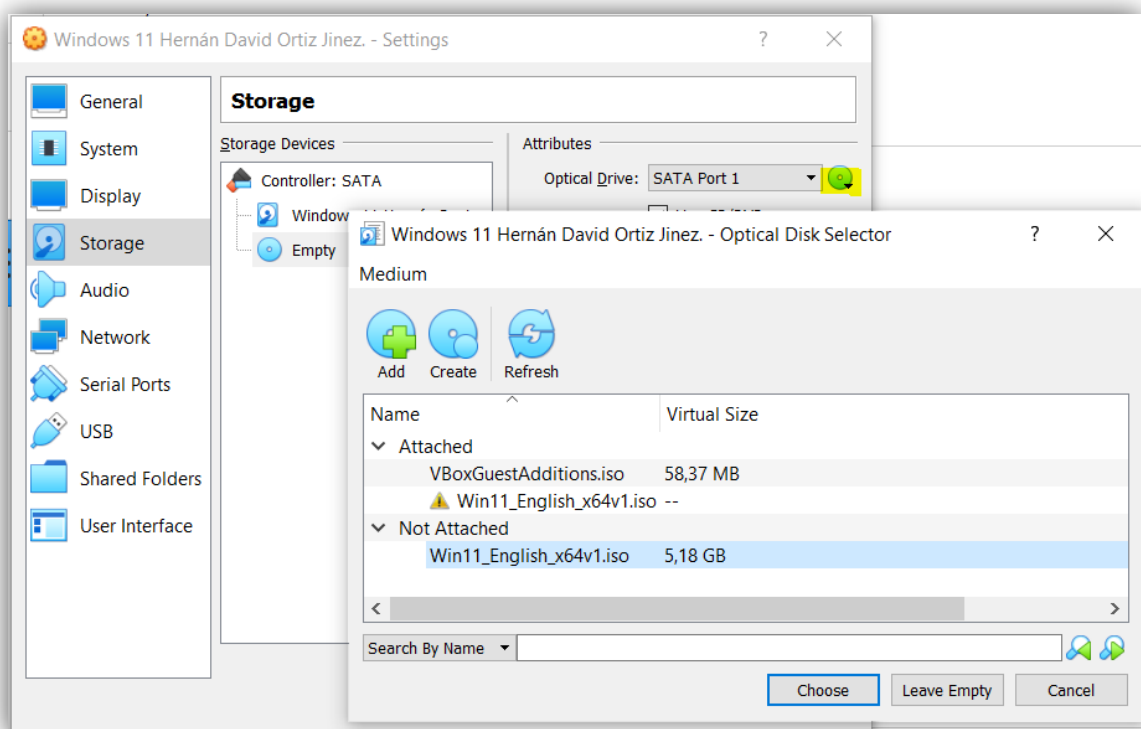
After that set the file size, in this case, I choose 50 GB.



For the next step, we need to set the boot order like it is shown below.

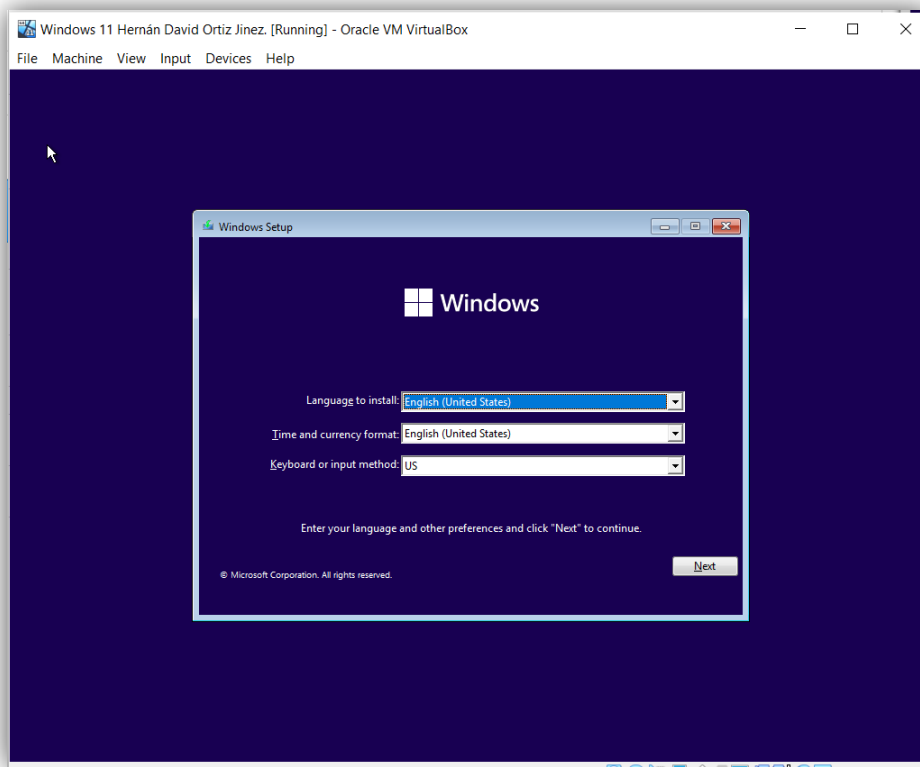


And then, go to Storage and click on the CD icon marked, and select the right ISO for windows 11.

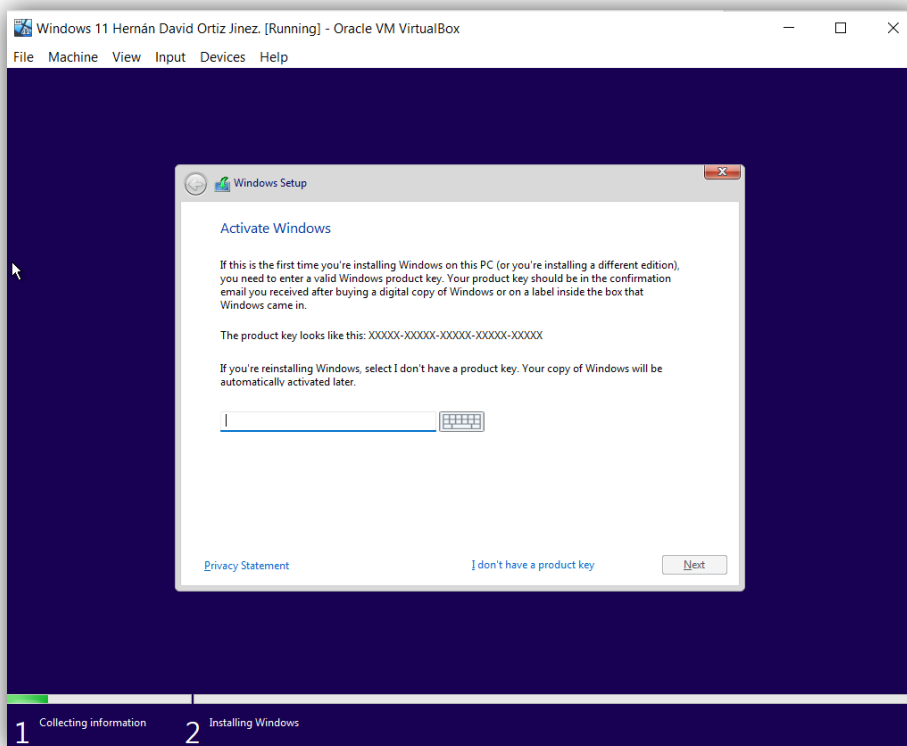


Now it is time to run our Windows 11, once the prompt appears you have to click scape as fast you can to continue.

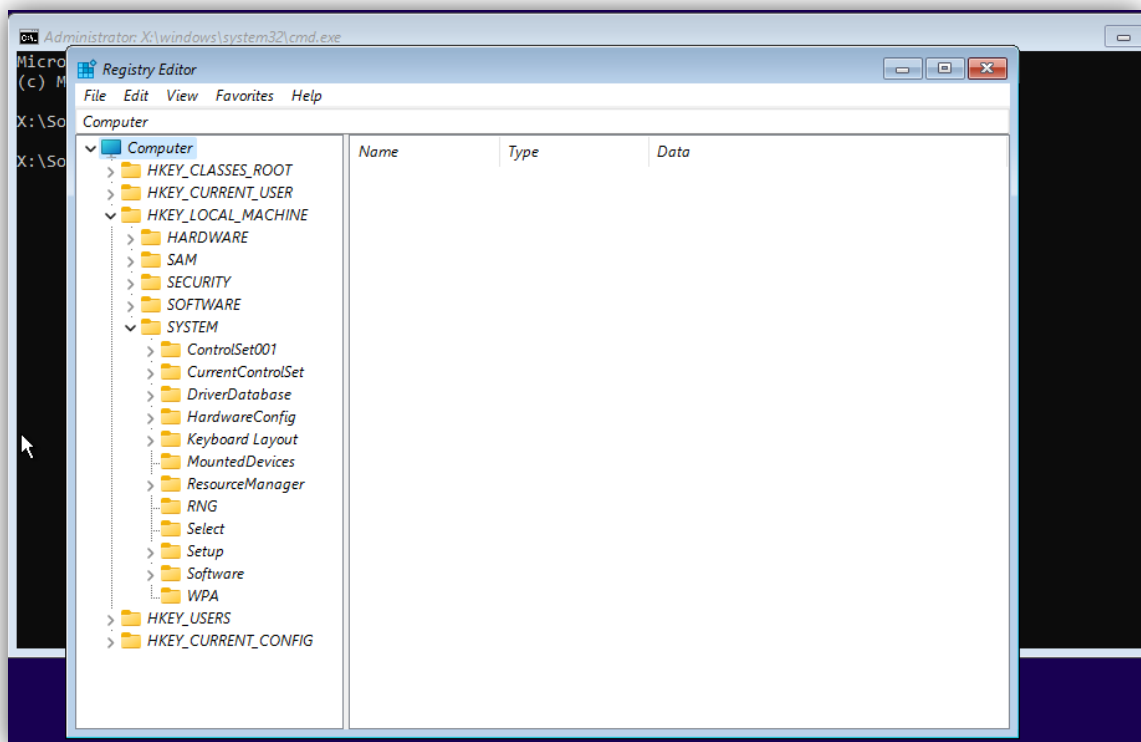
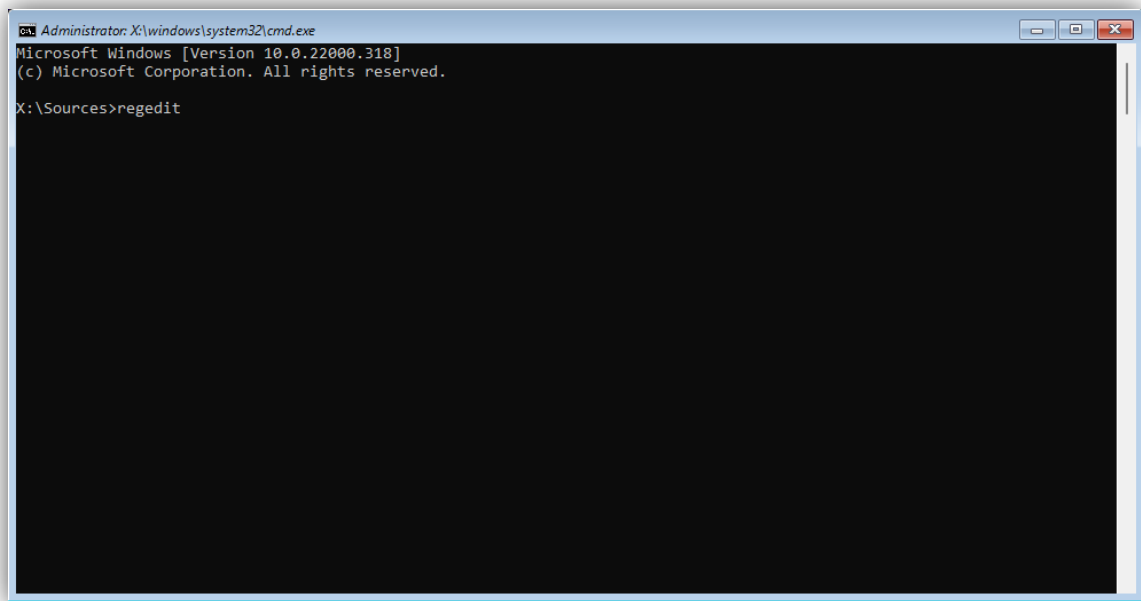
The next screen shown is the same as follows.



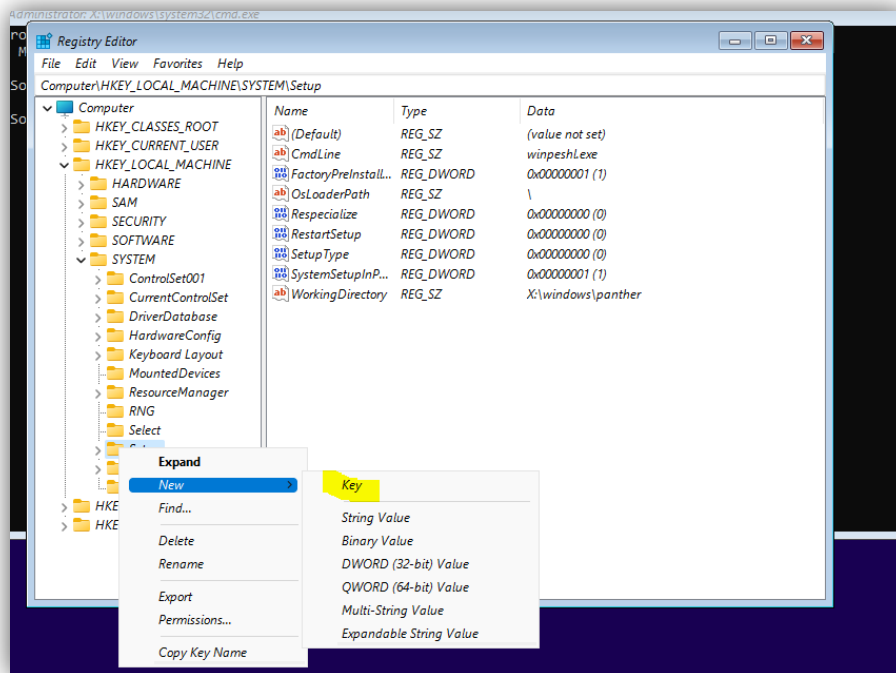
Once you get the next screen appears, hit shift+F10.



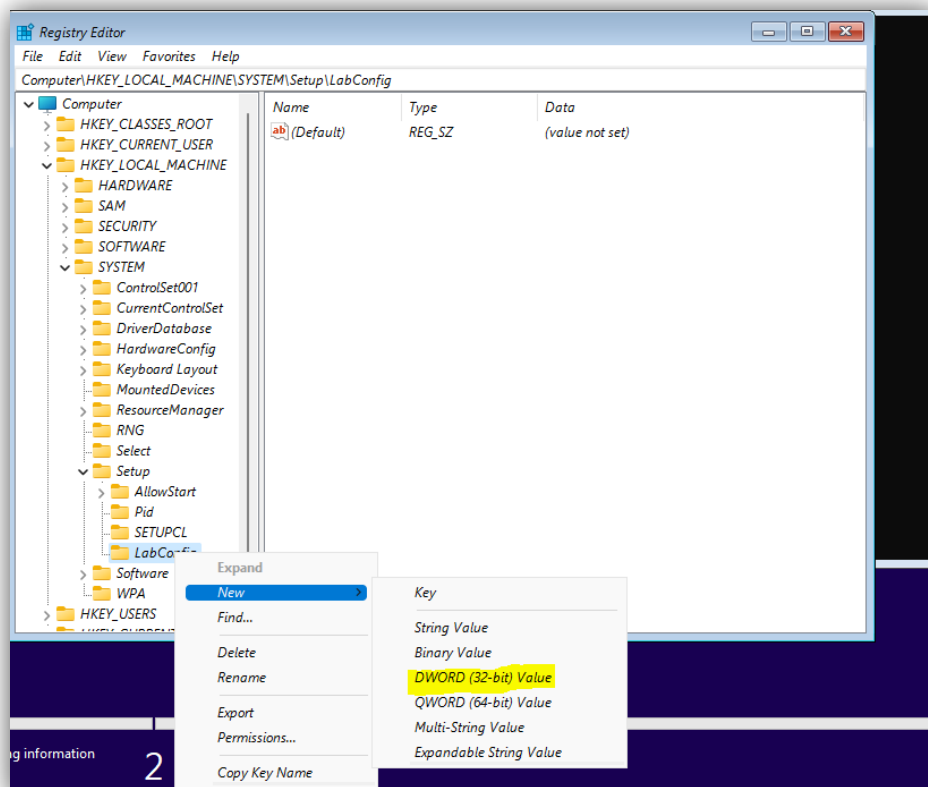
This is the screen that will appear, then write “Regedit” and click enter, then head to *HKEY\_LOCAL\_MACHINE > SYSTEM*, and set up on the left side.

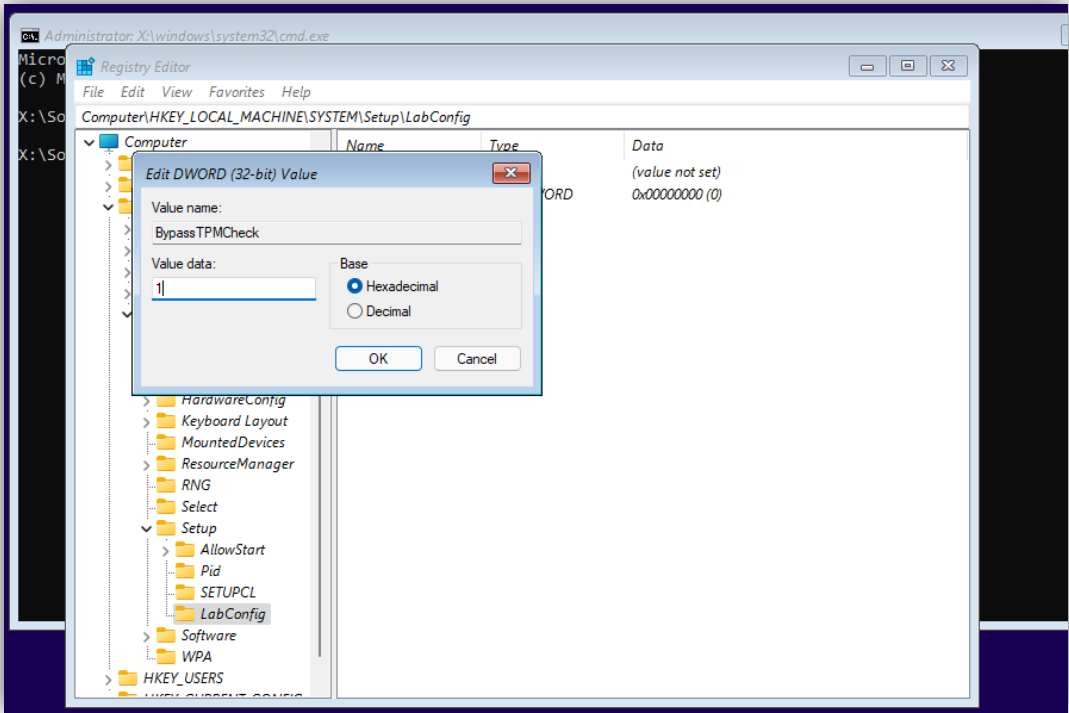


Then click with the right click on setup/new/key, named “LabConfig” and press Enter.



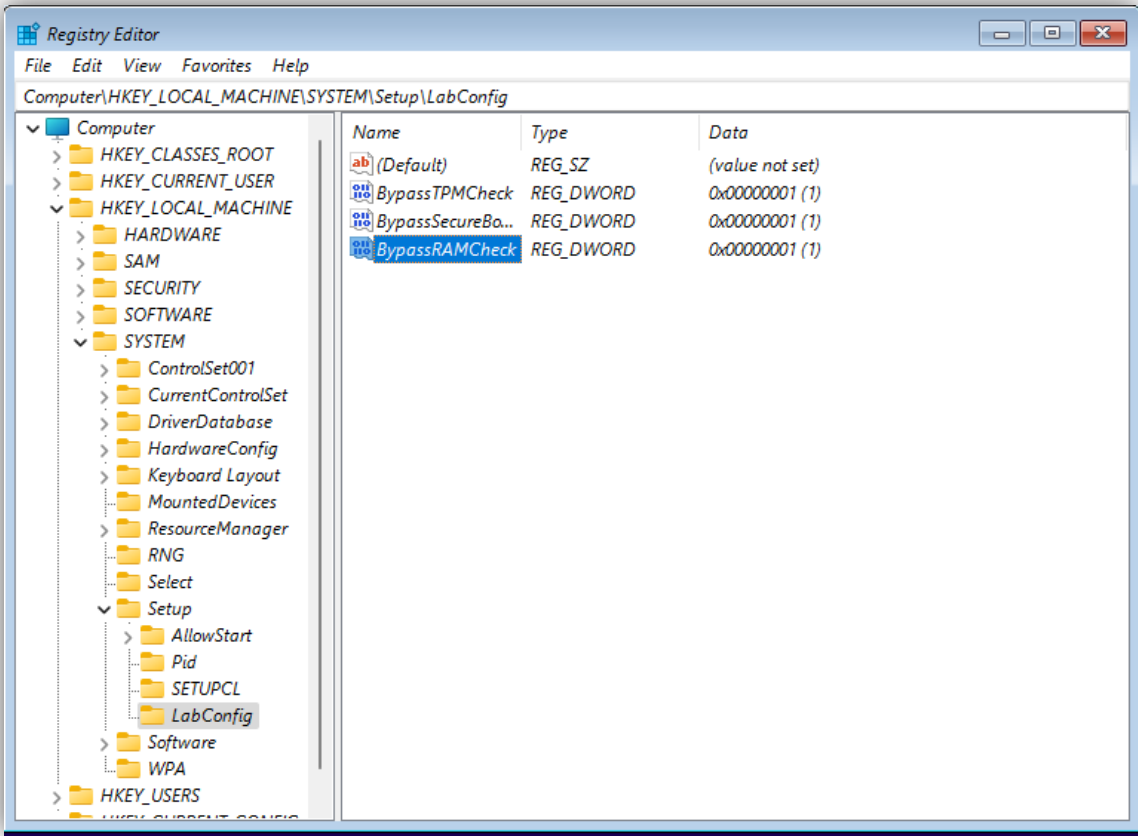
After that right-click on LabConfig and select new >Dword (32bit) and create a value named BypassTPMCheck. It is necessary to set data to 1bit by right-clicking on it and selecting modify.



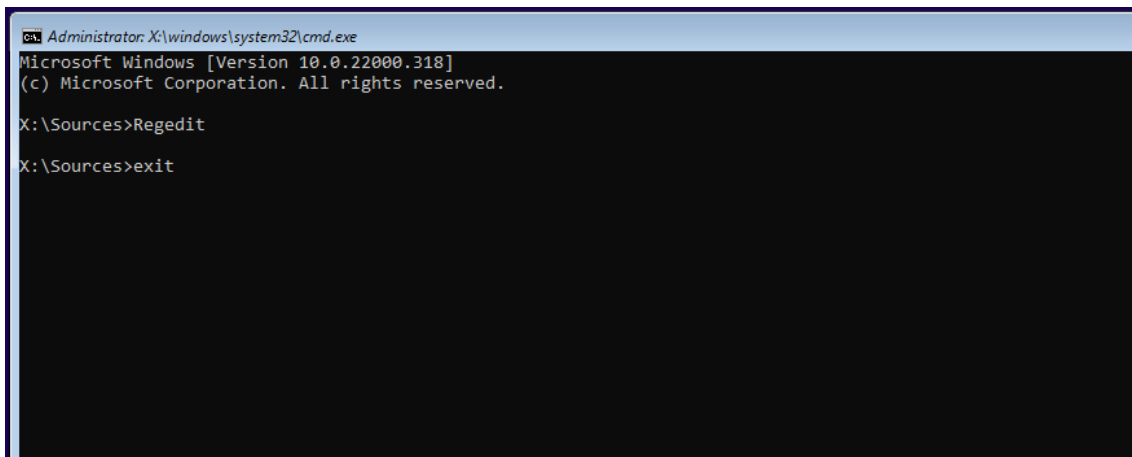


I will do the same step with the following files.

It should look like the image below.



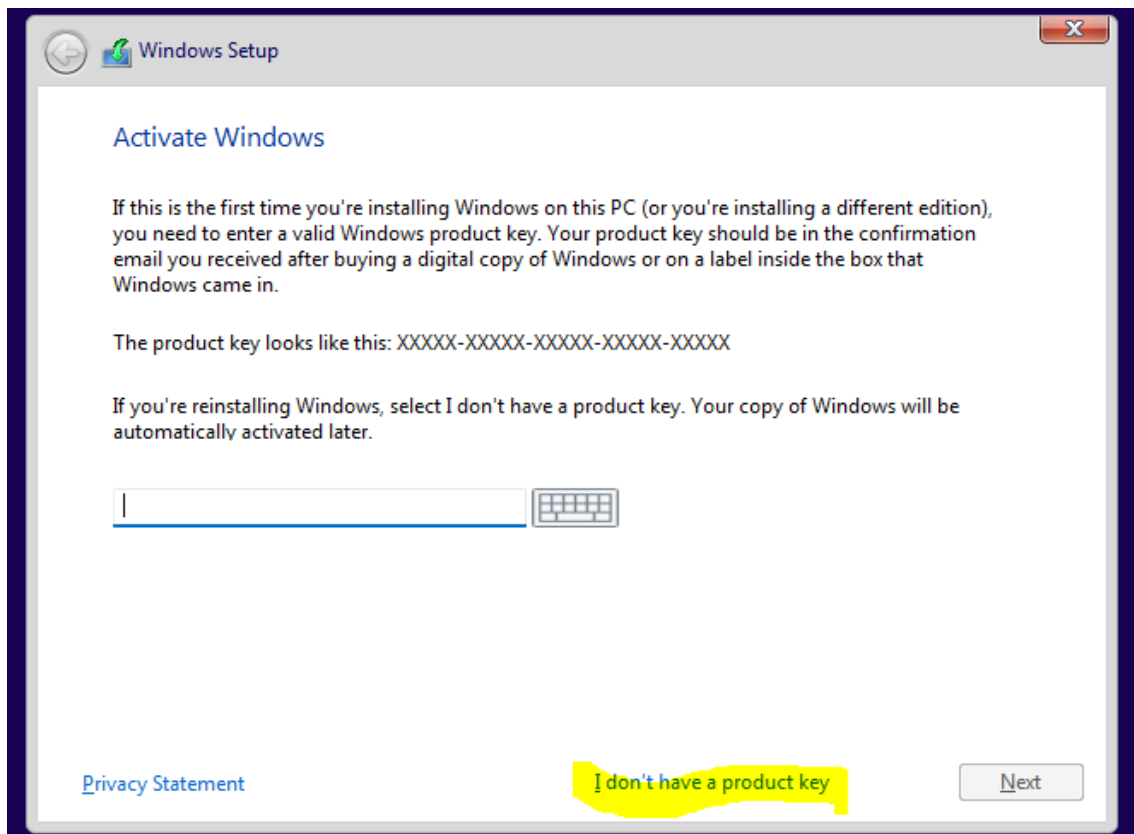
Then close the registry editor and write exit in the command prompt.

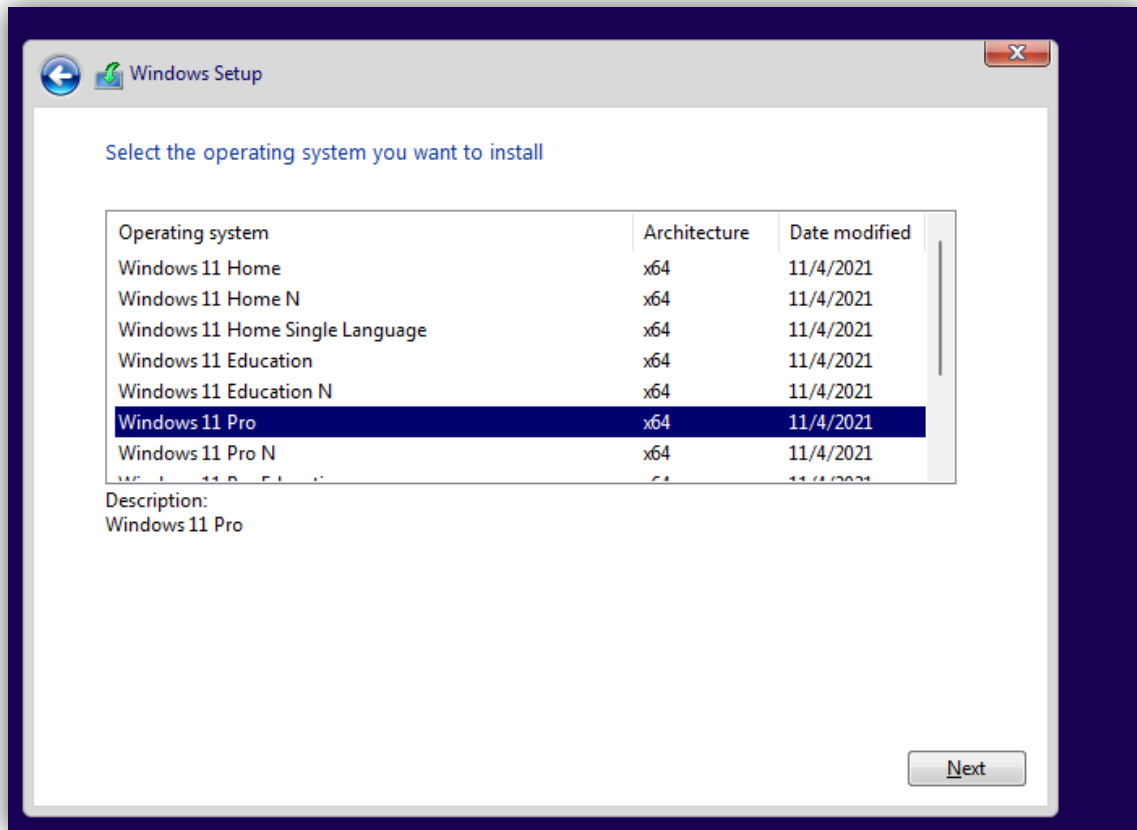


```
Administrator: X:\windows\system32\cmd.exe
Microsoft Windows [Version 10.0.22000.318]
(c) Microsoft Corporation. All rights reserved.

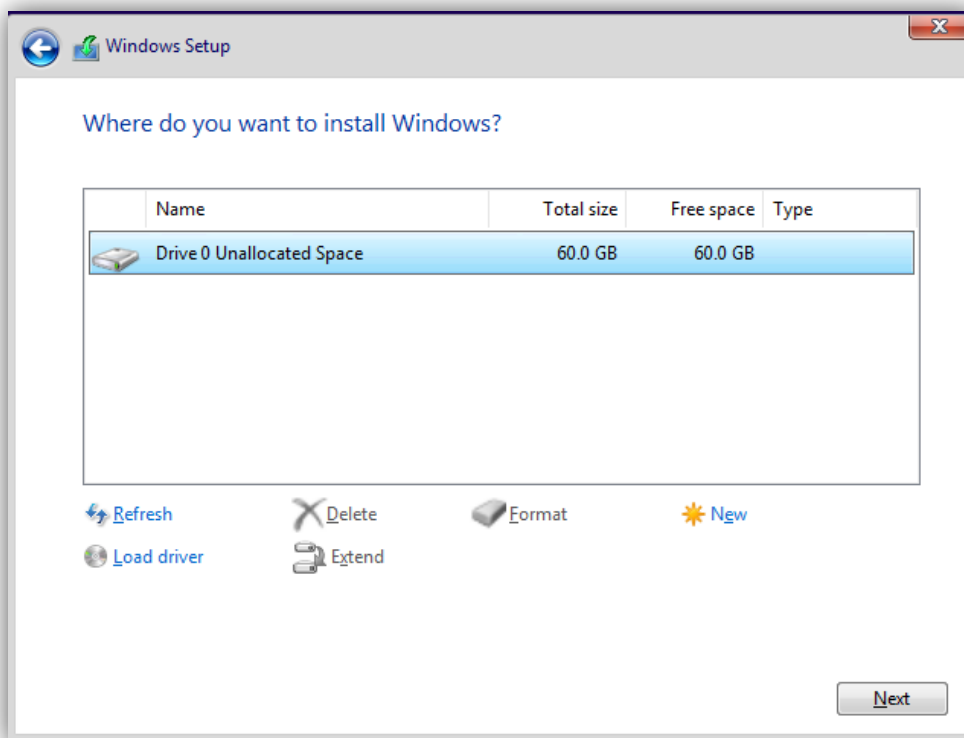
X:\Sources>Regedit
X:\Sources>exit
```

Click on I don't have a product key and follow the typical steps for installing windows.

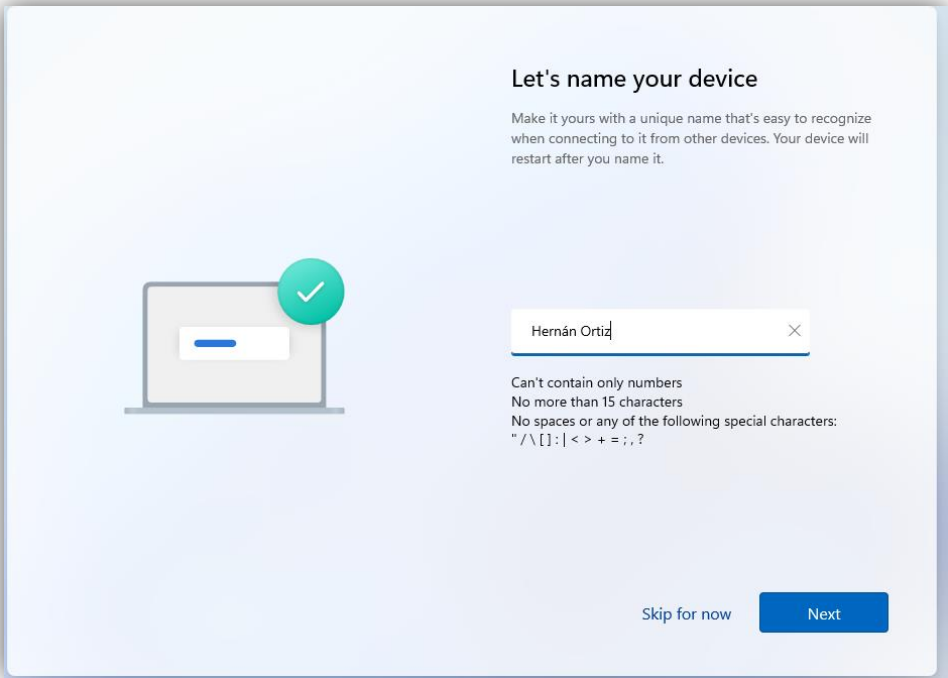
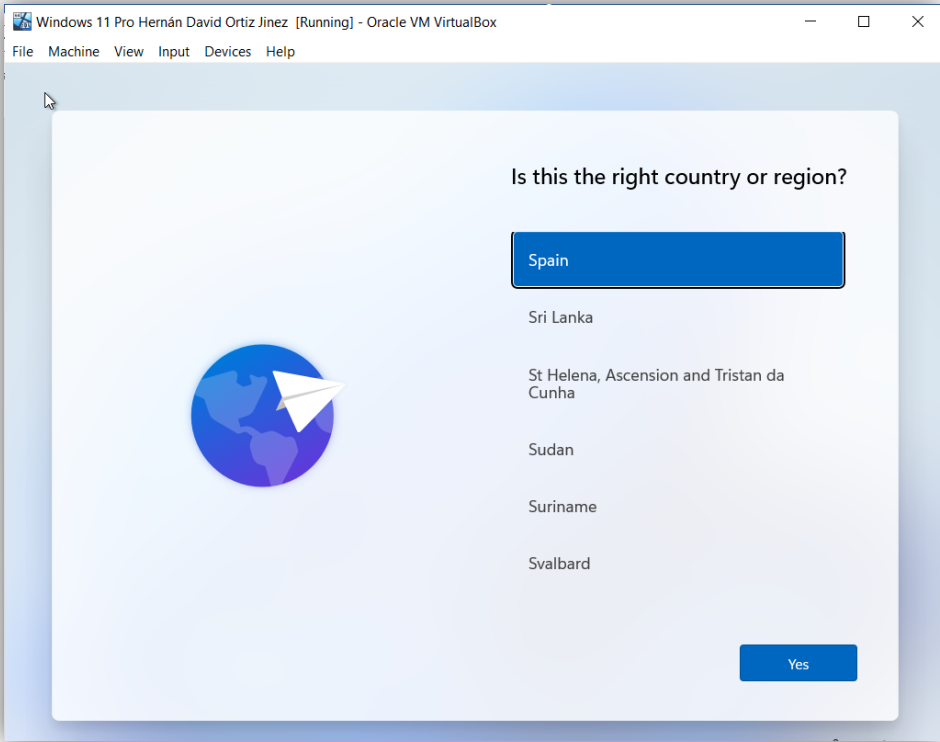


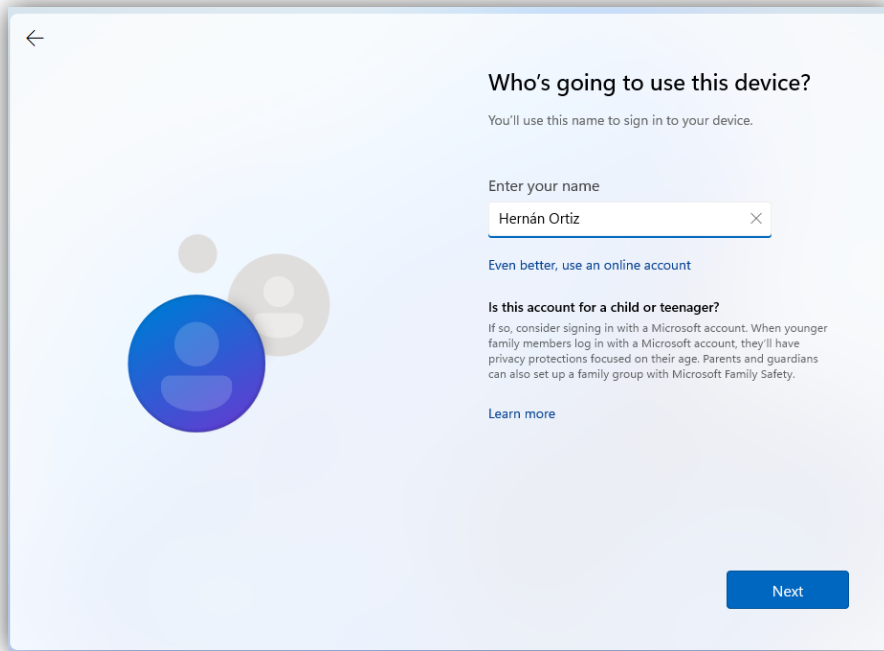


Choose the custom option in the type of installation.

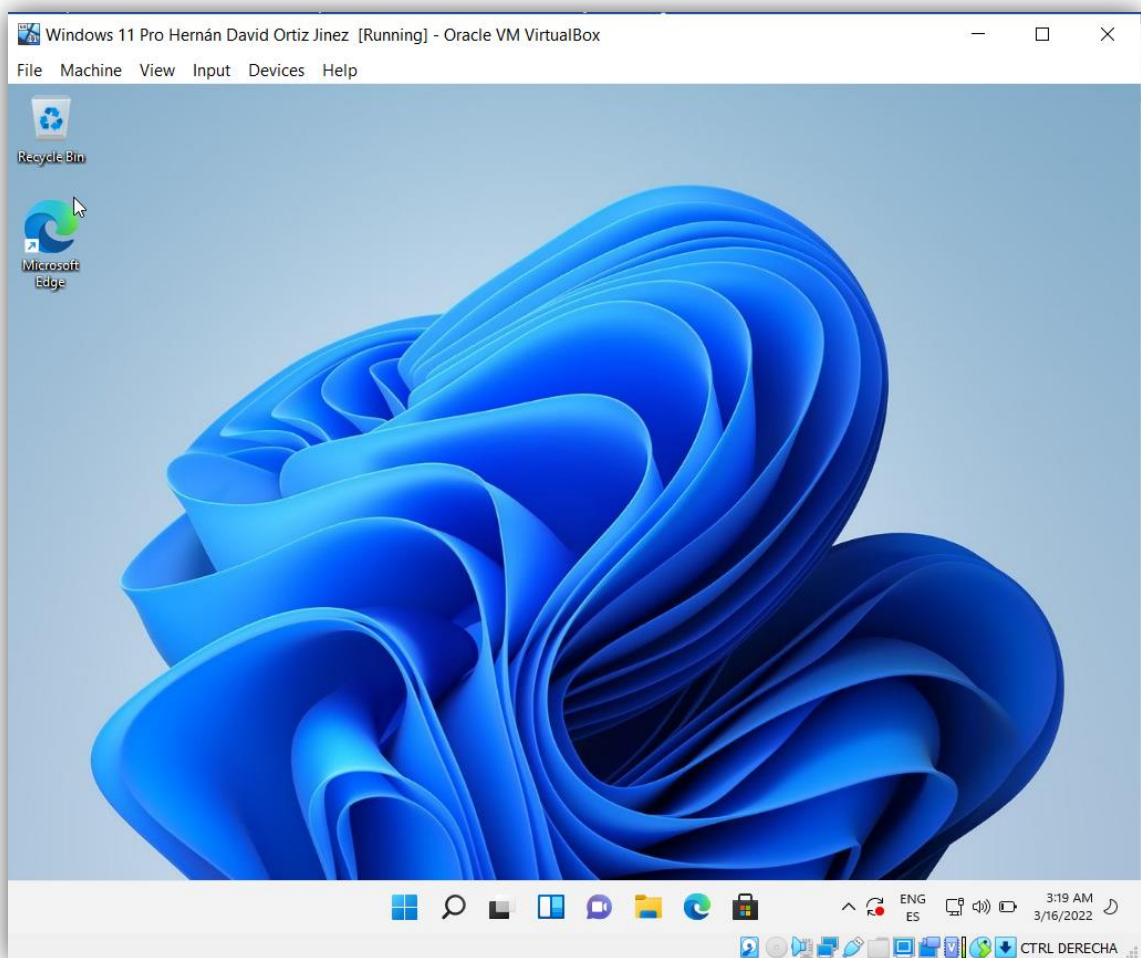








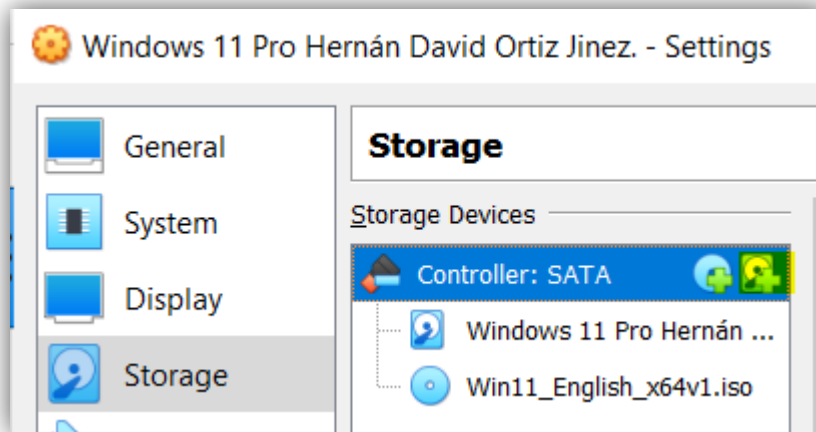
Now we have our Windows 11 installed.



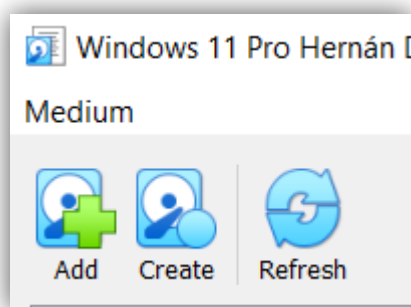
**Creation of RAID 0:**

For this, add in your VirtualBox 2 hard disk, go into the Storage option and add them following the next steps:

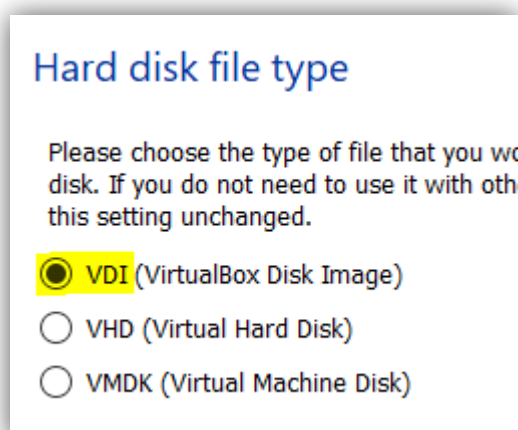
Click on the bottom marked:



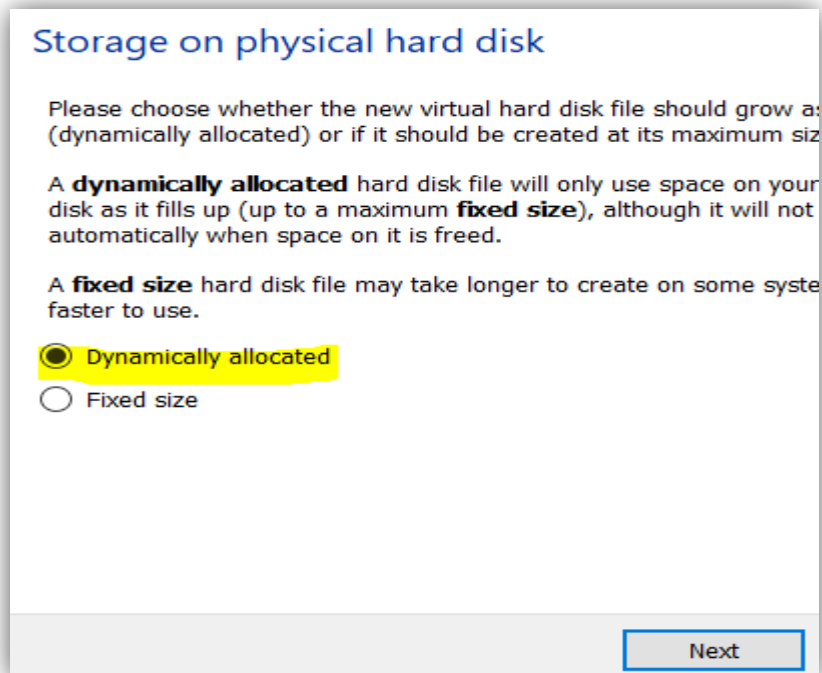
Then click on create option:



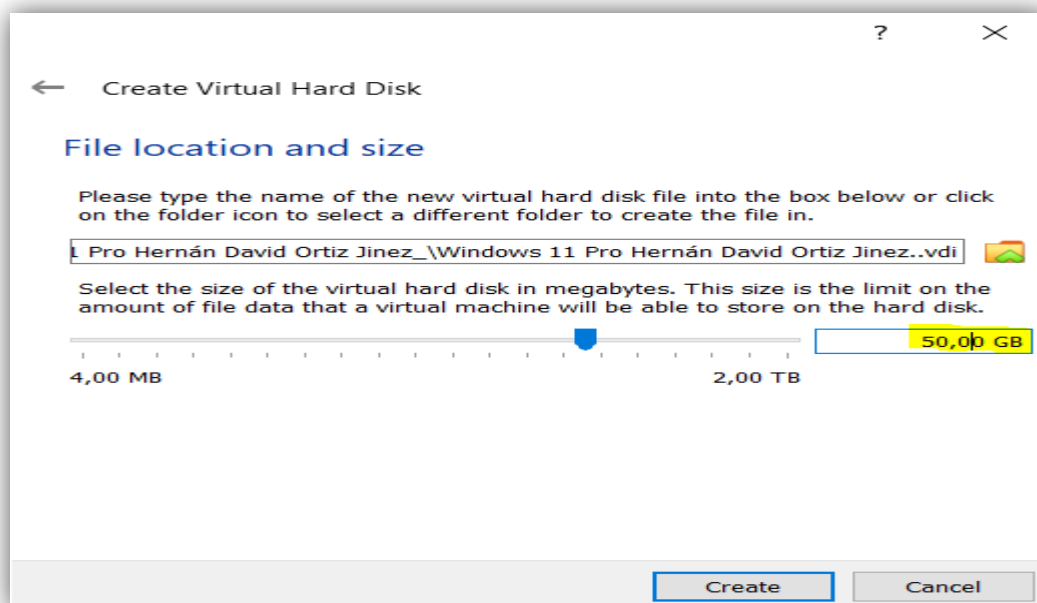
You must to select the VDI, and next:



In this case, we are going to leave as is shown below:

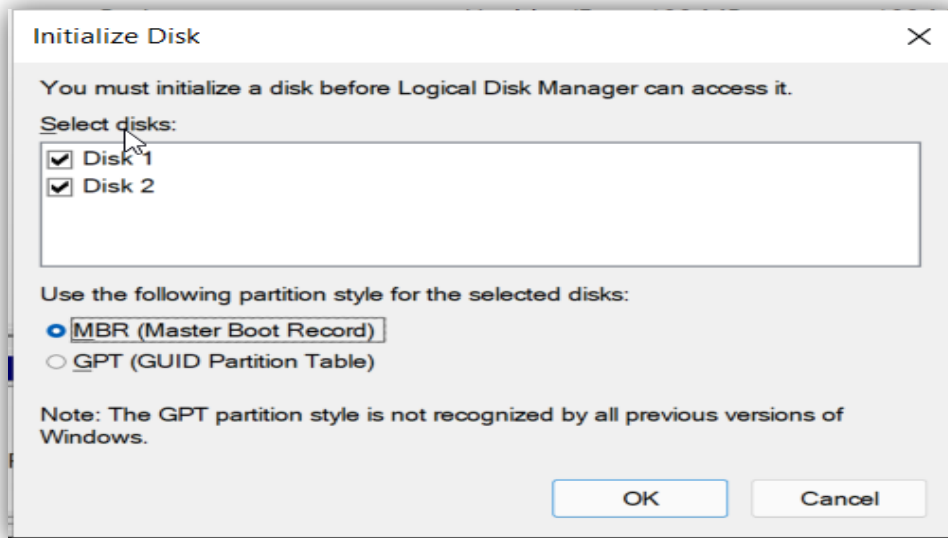


Select the size you want for each hard disk:

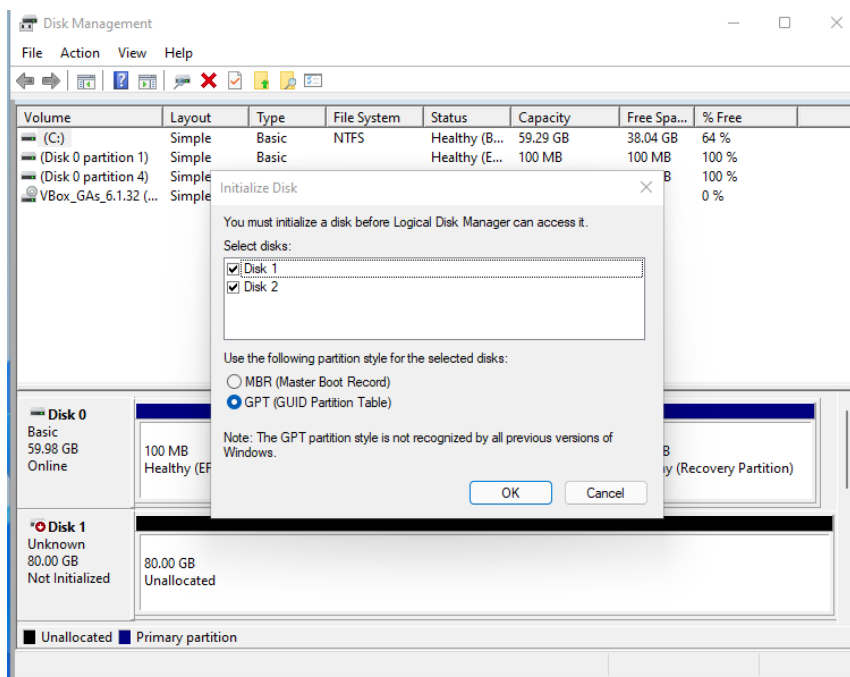


You need to do this process twice, in order to have two hard disks, after that enter in window 11 that previously was created and go to disk management and create simple volumes for both hard disks.

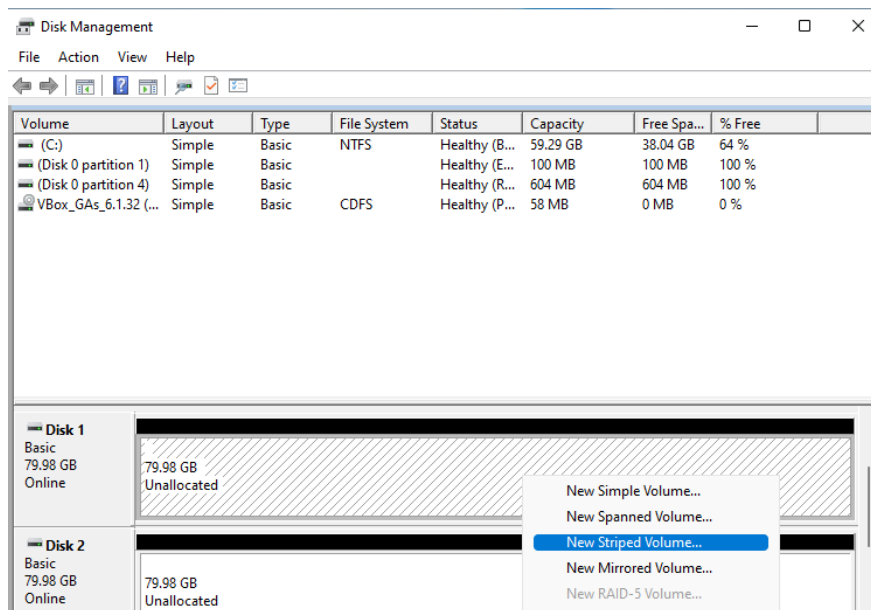
Before this, the system asks which kind of partition you prefer:



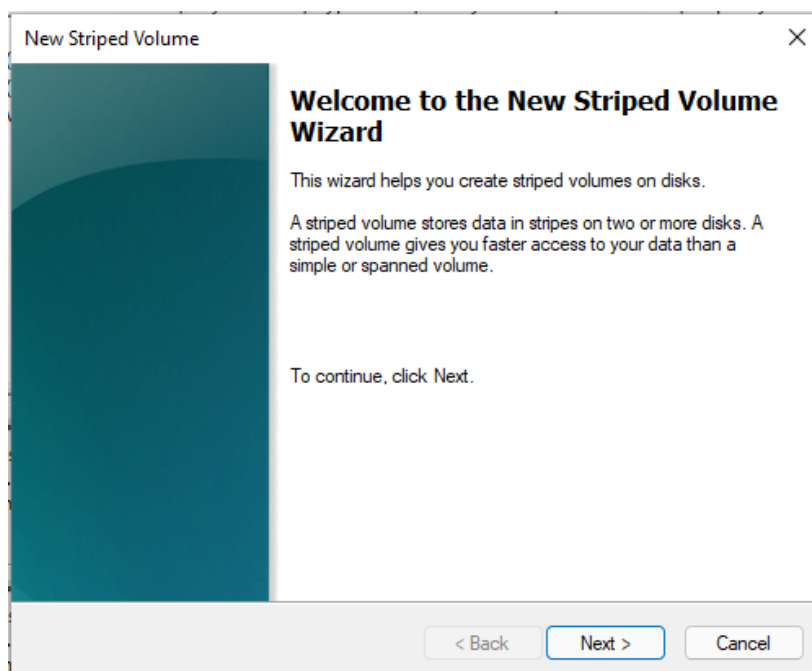
First of all, initialize the disk, in this case I select a GPT partition:



After that, right-click on the unallocated space and select the new Striped volume:



Click next on the next screen:



Select the two disks available and click on next.

New Striped Volume

**Select Disks**  
You can select the disks and set the disk size for this volume.

Select the disks you want to use, and then click Add.

Available:

Selected:

Disk 1	81902 MB
Disk 2	81902 MB

Total volume size in megabytes (MB): 163804  
Maximum available space in MB: 81902  
Select the amount of space in MB: 81902

< Back Next > Cancel

Type DDS1 in the volume label and click on next.

New Striped Volume

**Format Volume**  
To store data on this volume, you must format it first.

Choose whether you want to format this volume, and if so, what settings you want to use.

☐ Do not format this volume

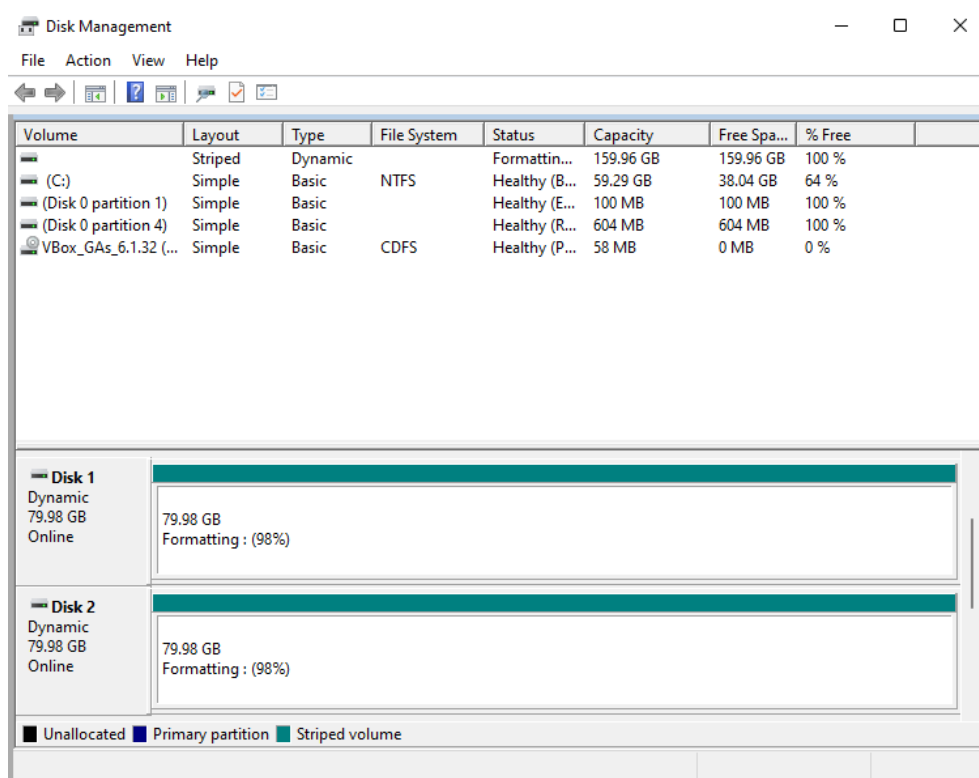
☒ Format this volume with the following settings:

File system: NTFS  
Allocation unit size: Default  
Volume label: DDS1

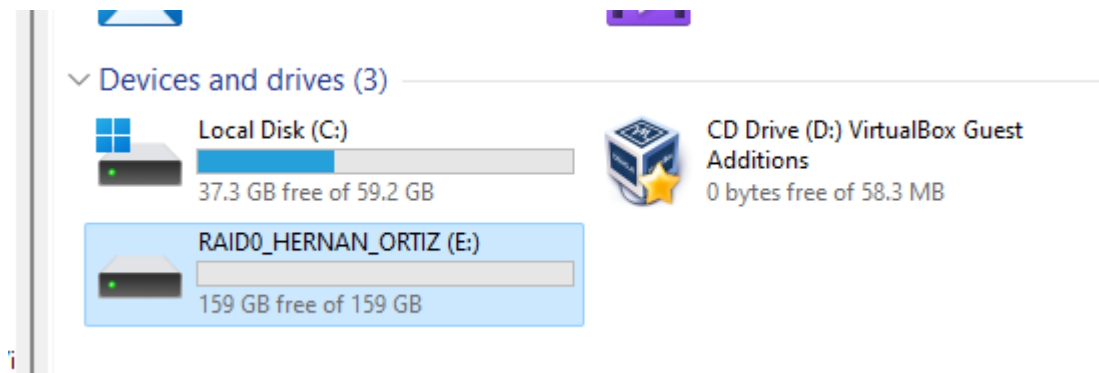
☐ Perform a quick format  
☐ Enable file and folder compression

< Back Next > Cancel

Then click on finish.



Then we have our RAID0 created:



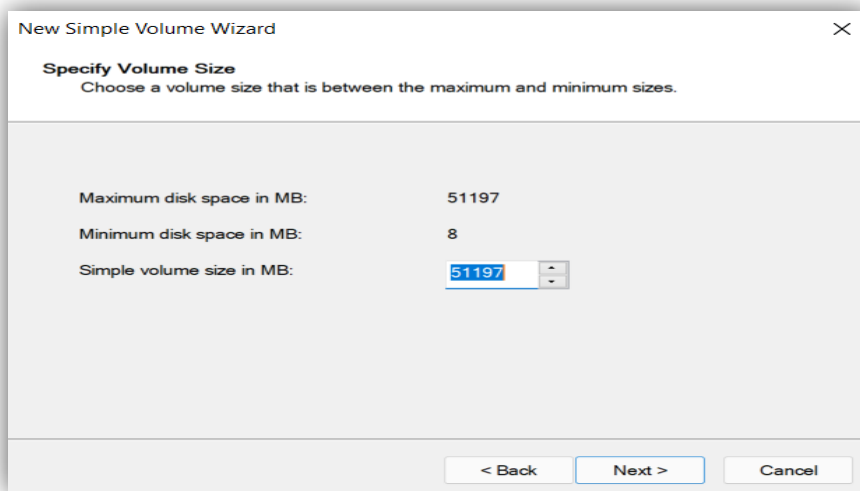
There is another way to do a RAID0 with a simple volume.

Right-click on the unallocated disk, and select a simple volume.

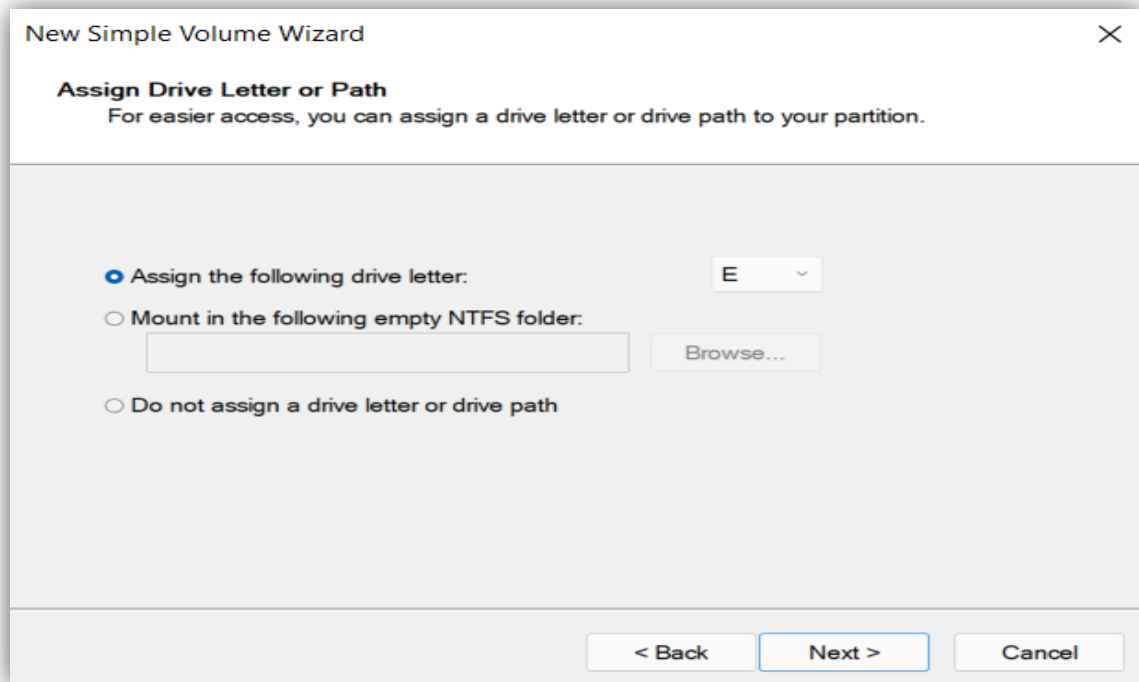




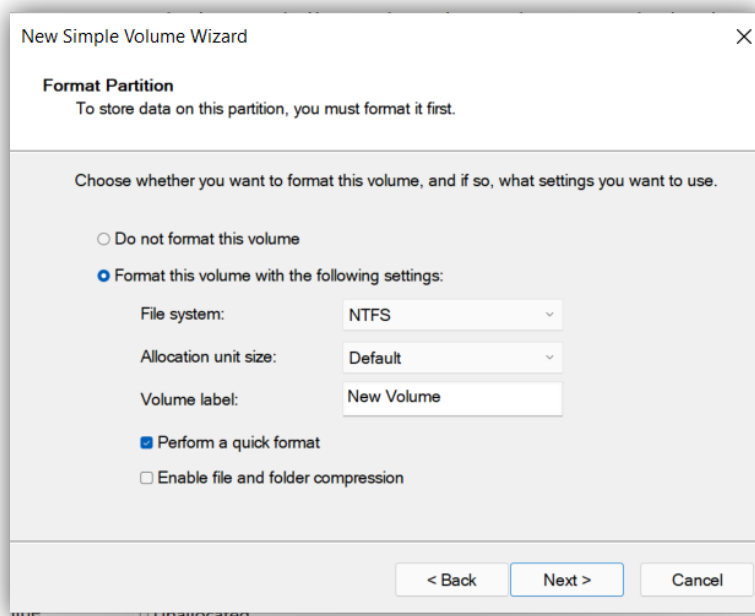
Specify the volume size for your volume:

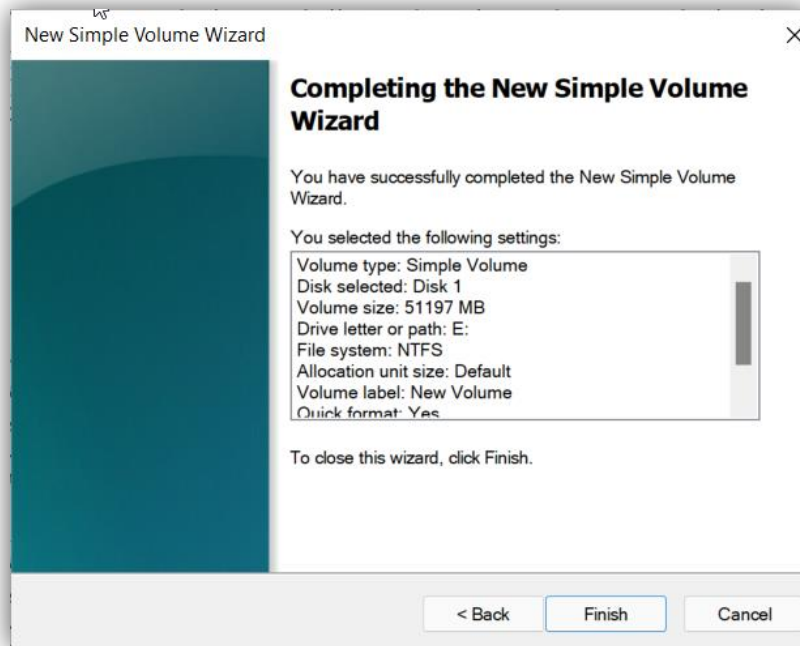


Assign the letter for your drive:



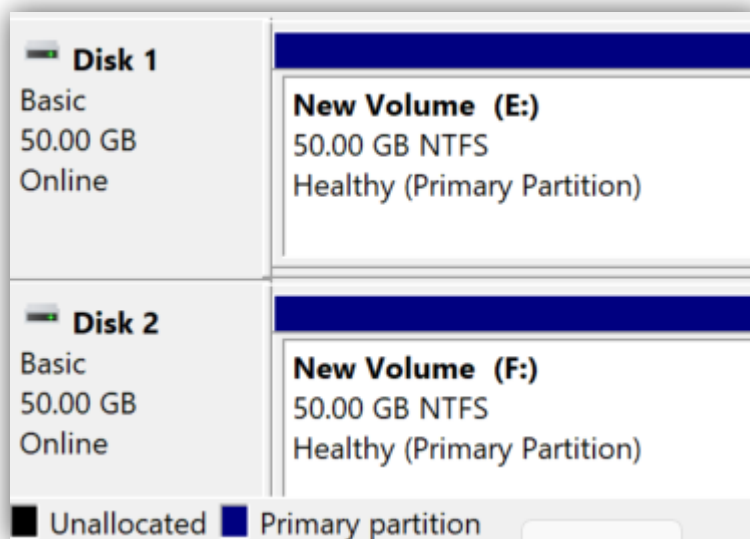
In this step we just need to follow the leave the option that appear by default:



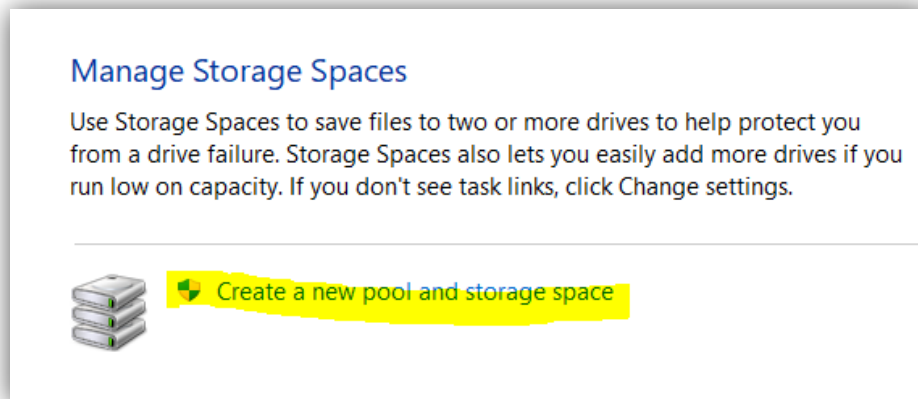


We have to do the same with the other disk.

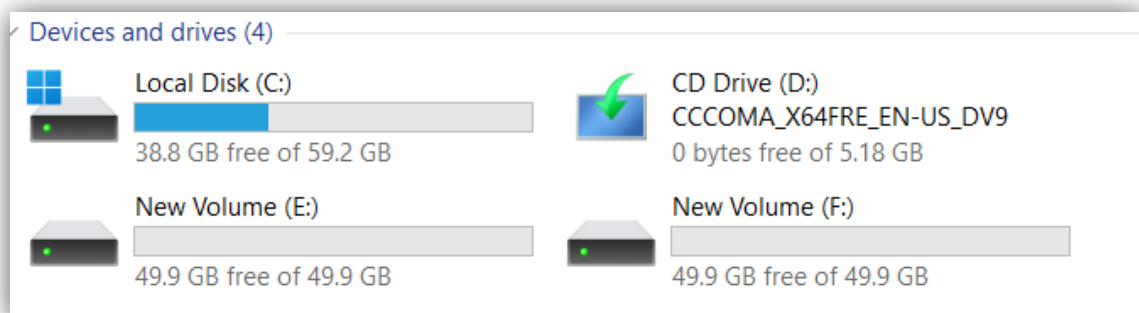
After that, we have our two volumes created as follows:



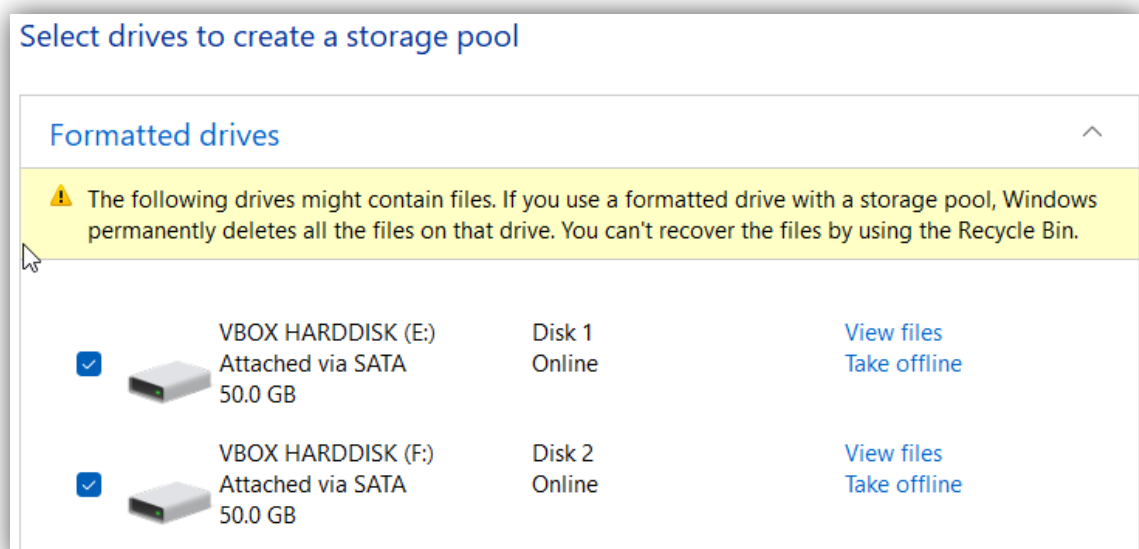
Go to Manage Storage Space and click on create a new pool and storage space:



If you take a look before doing this, you can observe that the two hard disks shown below will convert into one.



Select the hard disks and click on create pool:



Selecting the name, the drive letter you prefer, and the kind of file system, in our case I chose NTFS, also you must select in Resiliency type the simple one, because this is necessary for a RAID 0.

Name: RAID0\_Hernán\_Ortiz

Drive letter: E:

File system: NTFS

Resiliency

Resiliency type: Simple (no resiliency)

**i** A simple storage space writes one copy of your data, and doesn't protect you from drive failures. A simple storage space requires at least one drive.

Size

Total pool capacity: 98.7 GB

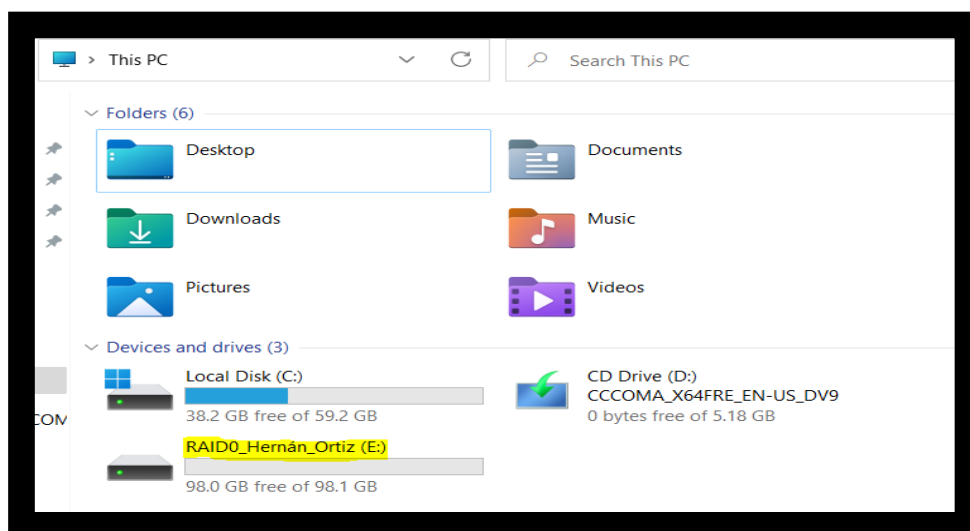
Available pool capacity: 98.2 GB

Size (maximum): 98.2 GB

Including resiliency: 98.1 GB

Create storage space Cancel

Now if we go back to the file explorer we can see the two hard disks are one with the fused memories in one RAID 0.



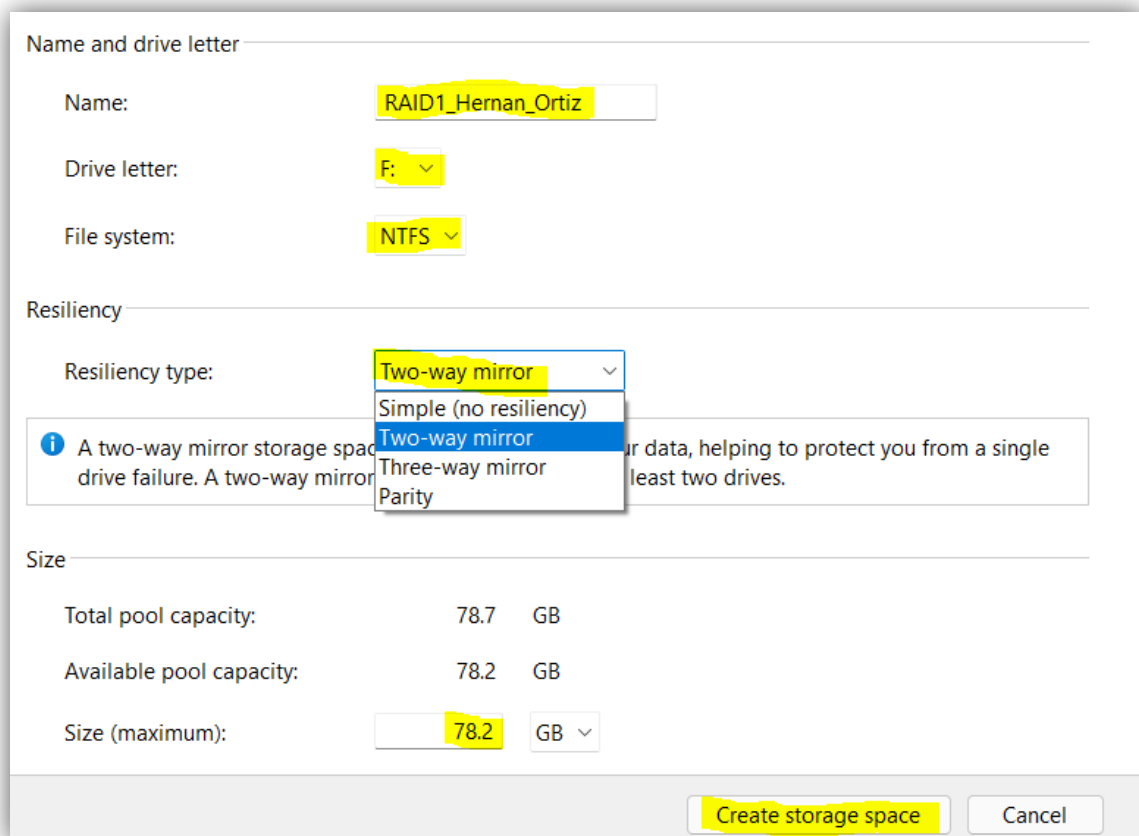
## Creating a RAID 1:

In this case, it is necessary to follow the same steps as previously with the RAID 0.

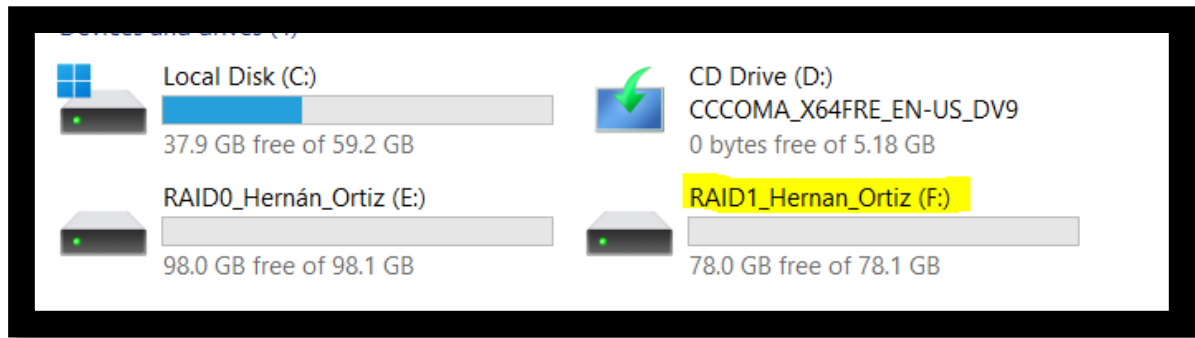
Then create two simple volumes,



Go to Manage Storage Spaces and set as follows, the unique thing that is different compared with RAID 0, in this case, we need to select in Resiliency type “Two-way mirror” because we have 2 hard disks, if we have more than two we would select “Three-way mirror”.



If you go to the file explorer you can see you have your RAID 1 created:

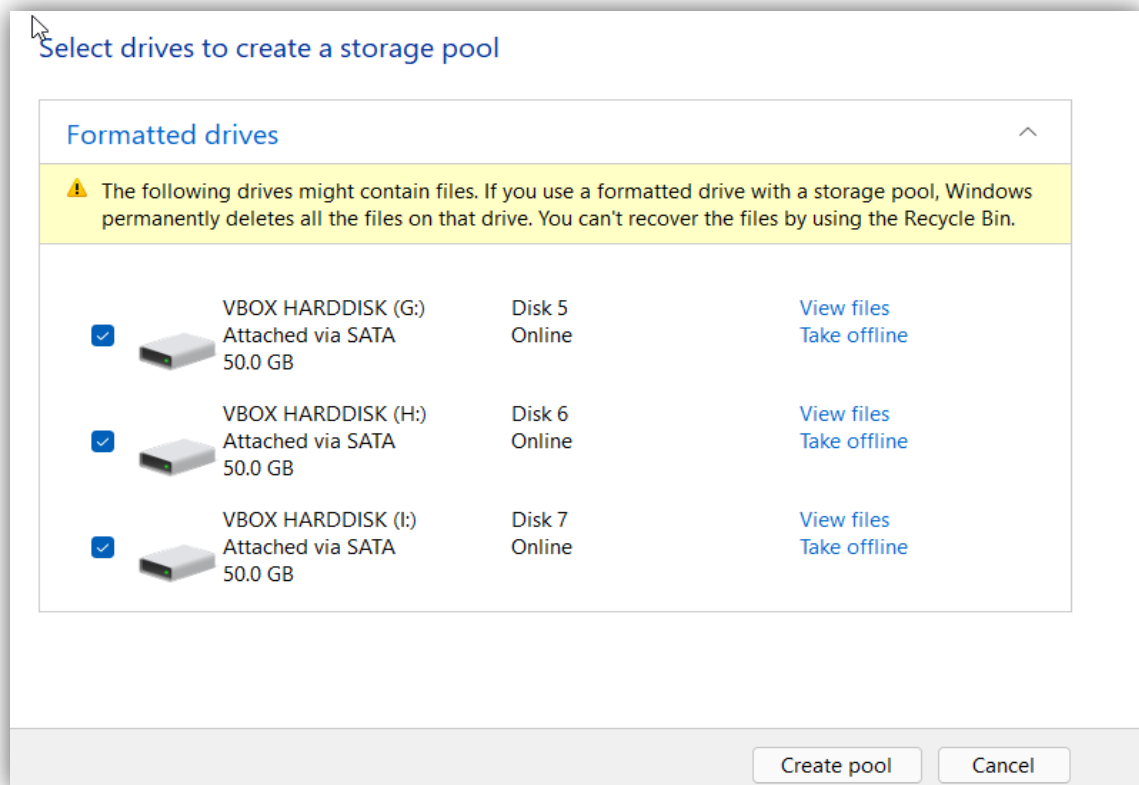


### Creating a RAID 5:

First of all, I am going to explain what is a RAID 5 compared with the other two RAID did before, the main feature of RAID 5 is that we will get the main advantages of RAID 0, so we will get more speed and the security of the RAID 1 because we will have two disks to save the data. This is the reason why we need at least three hard disks for a RAID 5.

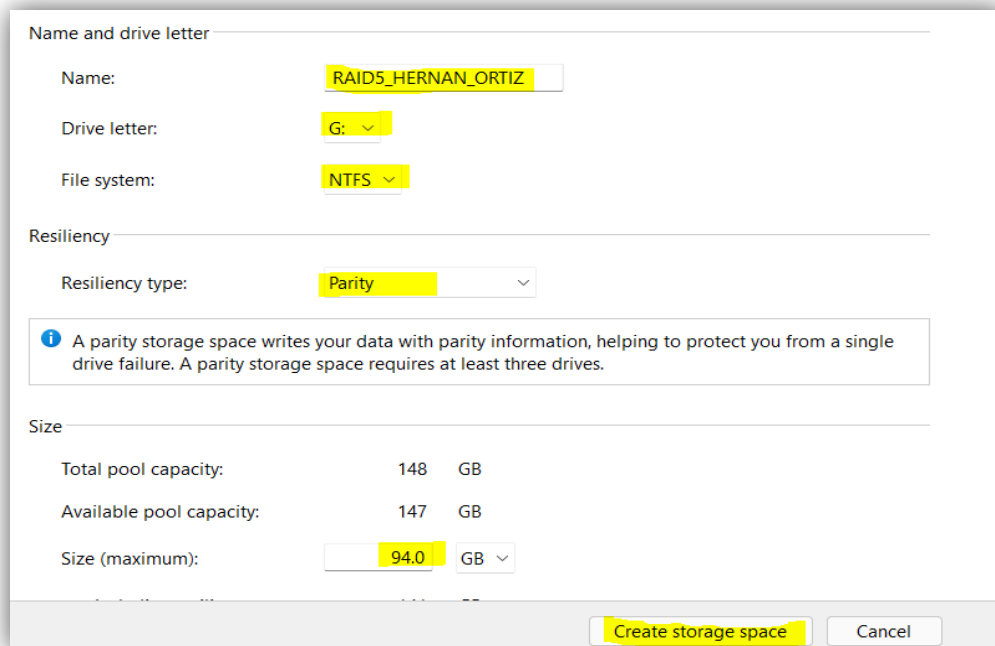
We need to do the same steps as before, so create three simple volumes at least.

Select the hard disks that you want for this proposal.

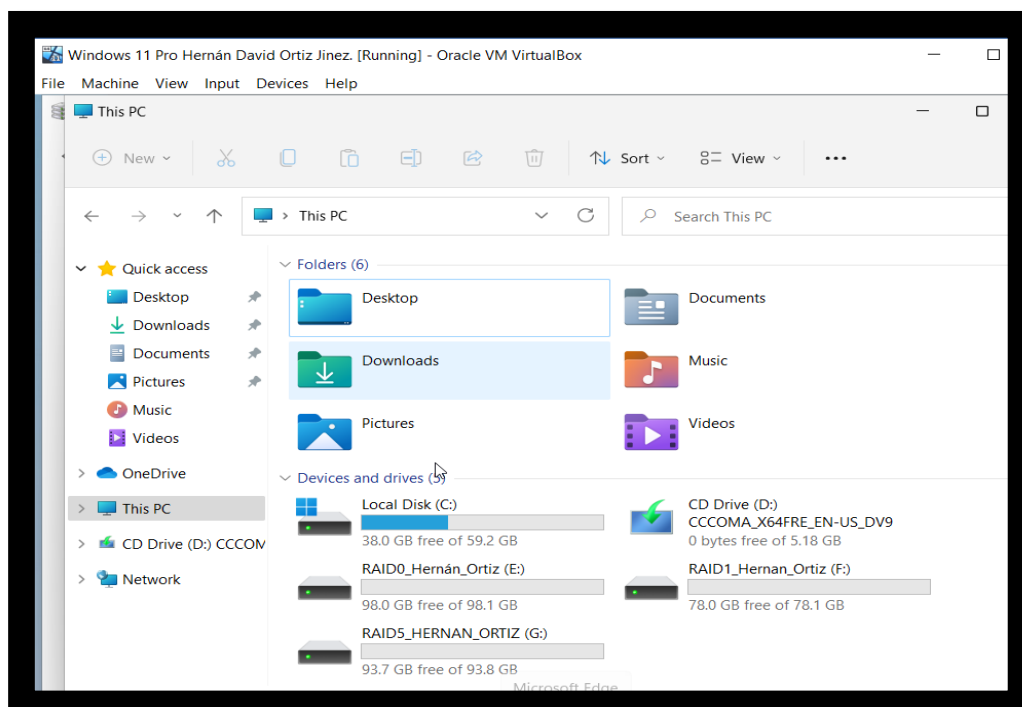


Then create pool and set the following configurations.

In this case, the main difference is that we need to select Parity in Resiliency type, and another thing to take in mind is we will not get the sum of the three hard disks just the sum of two of them.



Now we can see that the RAID 5 is created.





One of the new features of Windows 11:

A redesigned Taskbar, with this new design we can do more than see our application and the time, the new Taskbar allows us to customize in many different ways, such as changing the color, pin your favourites apps to the Taskbar, even moving and reorganize buttons in the toolbar.

Change color: right-click on the Taskbar /click on taskbar setting/personalization/select the theme to change the color.

Open new desktop: the Taskbar contains a new option where you can open a new desktop, giving you the possibility to organize your activities, one option could be to keep dividing your desktop for your studies and another one for gaming.