For the following exercises, you have to use a Windows 7 or 10 virtual machine. To solve the exercises, create a document with screenshots including the settings for each part.

## Exercise 1

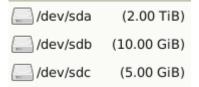
First, let us create a new hard disk for the virtual machine. Then, we are going to create the following partitions:

- A NTFS primary partition of 2GB called PNTFS.
- An EXT4 primary partition of 2GB called PEXT4.
- An extended partition of 4GB.
- A logical partition of 2GB called PFAT32.

Now open Disk Management in Windows. You should have a configuration just like in the picture below.



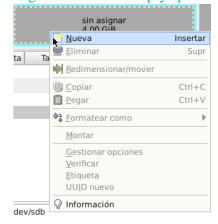
We select the correspondent drive device



We add a partition table to the drive, in our case msdos.

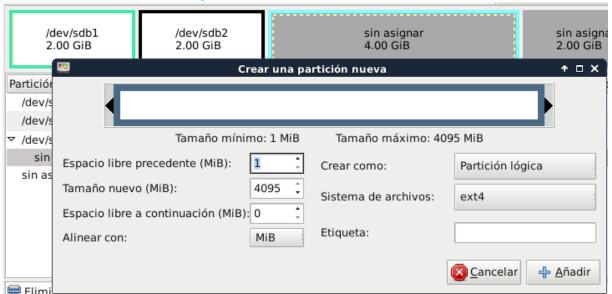
<u>C</u>rear tabla de particiones... Intentar <u>r</u>escatar los datos...

Right click on an empty space of the drive and then left click on new.



There will pop up a window where we would be able to:

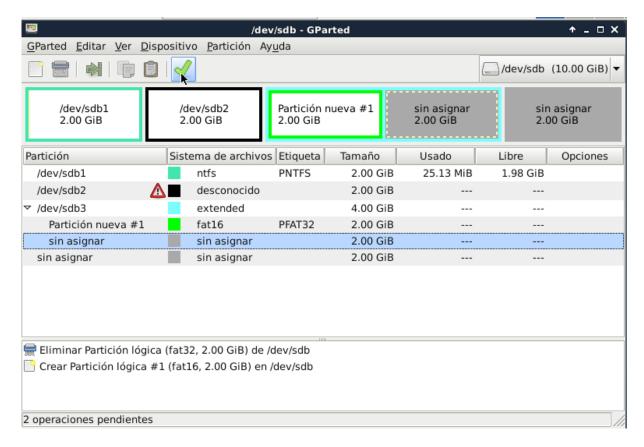
- Select how much space will be free before the partition.
- Select the actual size of the partition.
- Select how much space will be free after the partition.
- Choose the type of the partition we want to create
- Choose the file system for the partition
- Write a name / label to the partition.

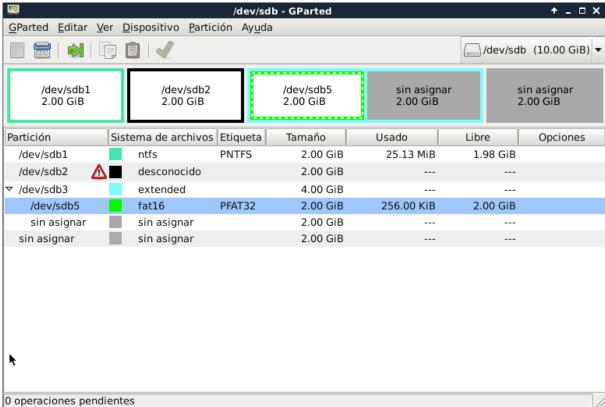


In this particular case, I am going to create a logical partition with a size of 2 GB. This is because I'm creating a new partition inside a an extended partition. The file system will be fat 32.

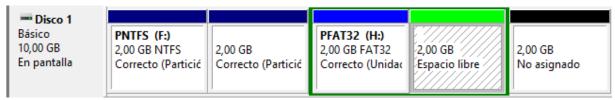


We click on add, then we click on the green tic on the upper part of the window so the changes take effect.





Answer the following questions



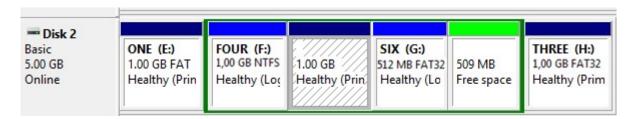
- 1. Why is the file system not showed in the second partition?

  Because windows does not recognize ext4 file sistem.
- 2. If you had to create a new partition to store 2 GB data, where would you put the partition in? Which file system should you use? Justify your answer.

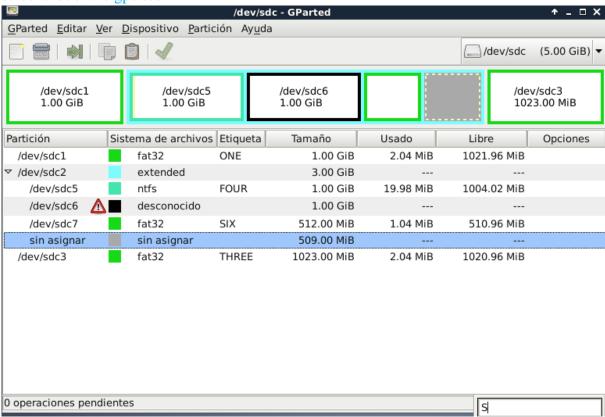
We can only use the last bit of the sectors of the disk, as are the only sectors free. I would use ntfs file system as we are going to be sing windows.

## Exercise 2

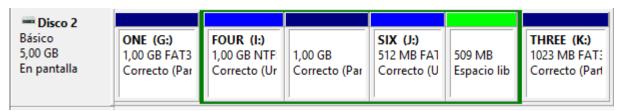
Create a new disk of 5GB in the same Windows virtual machine. Now, configure the partitions with GParted to get the following result:



The partitioning steps are the same as in the exercise before so I'm just going to take a screenshot of the gparted



## Answer the following questions



1. How does GParted name the new hard disk?

In my case, Linux named the third disk sdc

2. List all the partitions you have created, indicating type and file system.

