

UNIT 02: INSTALLATION OF DIFFERENT OPERATING SYSTEMS IN A COMPUTER

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.

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

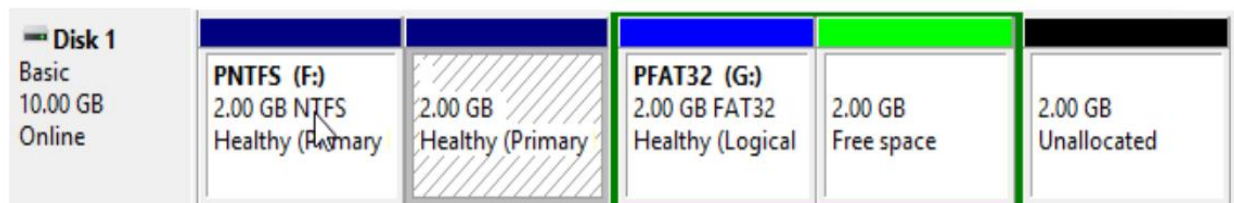
- A NTFS primary partition of 2GB called PNTFS.
- An EXT4 primary partition of 2GB called PEXT4.
- An extended partition of 4GB.
- A logical partition of 2GB called PFAT32.

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

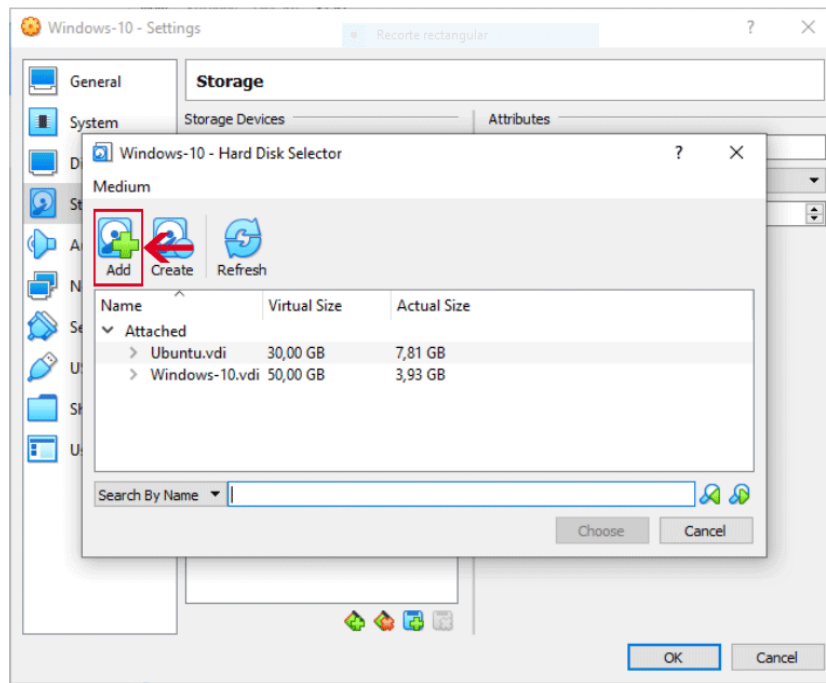
Answer the following questions. Justify your answer.

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

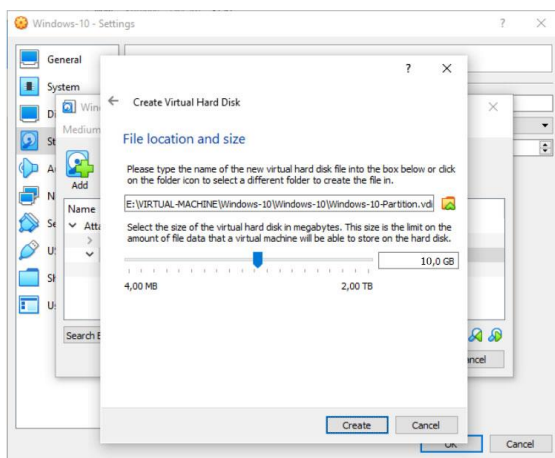
CONFIGURATION OF DISK MANAGEMENT IN WINDOWS



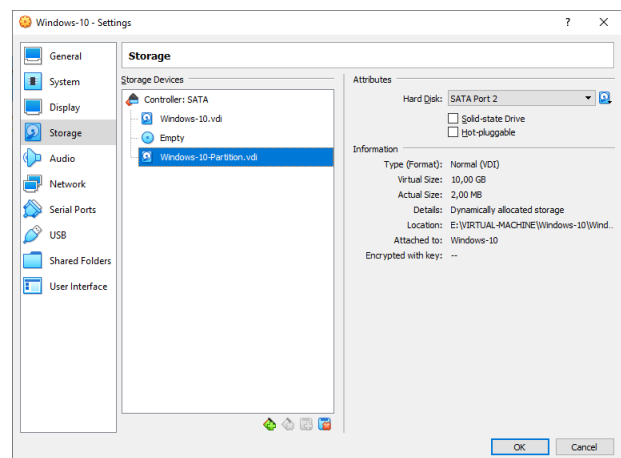
STEPS



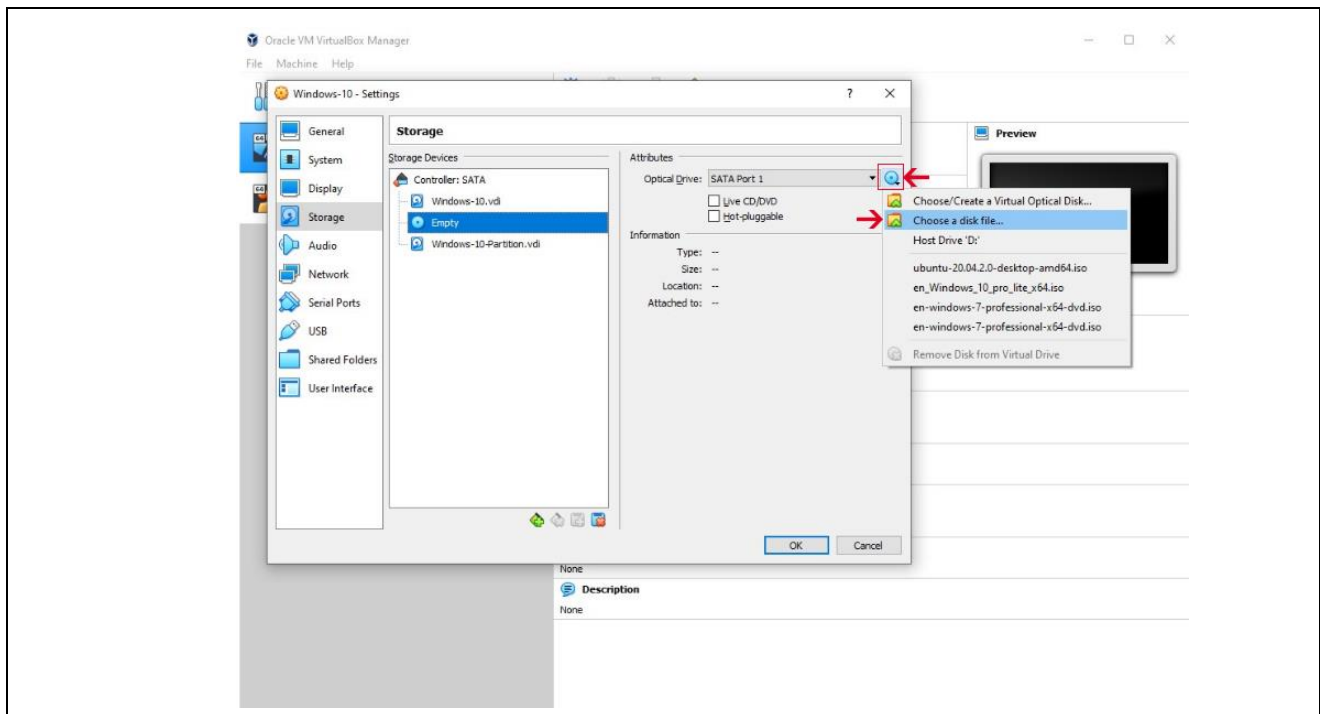
Hard Disk Selector > Click on **Add** to create a new hard disk of **10 GB** for the VM.



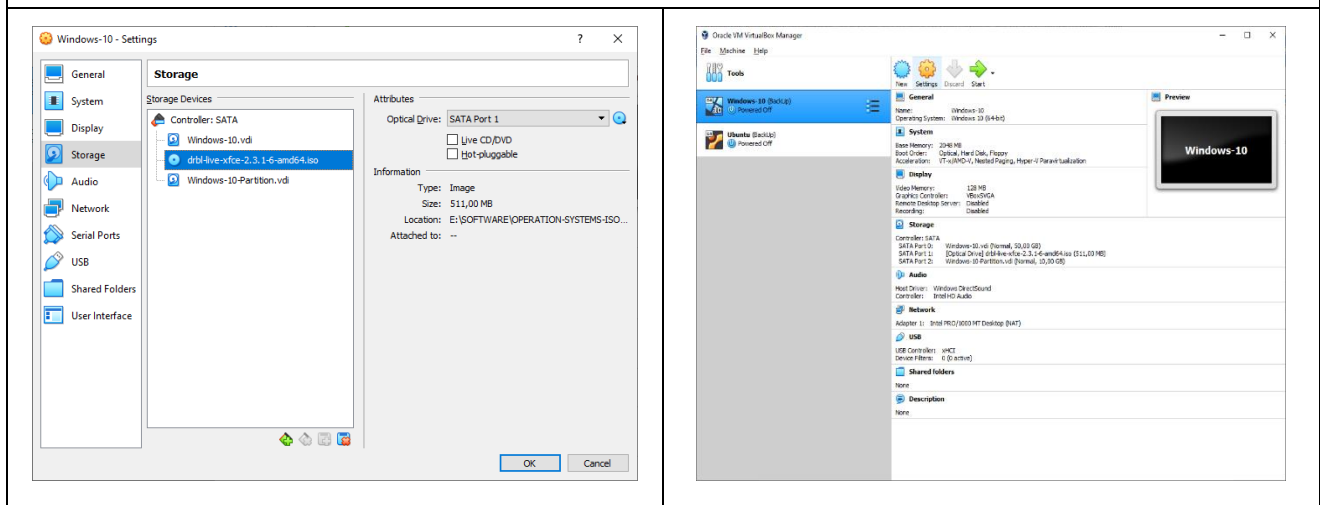
Select file location, name and size.



The hard drive named **Windows-10-Partition**.

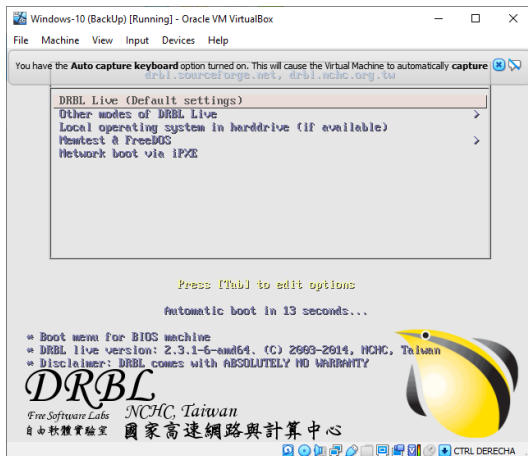


To install **Debian Live User** > Select the **empty Virtual Disk**
 > Click on the icon located on the left > Click on Choose a disk file ...

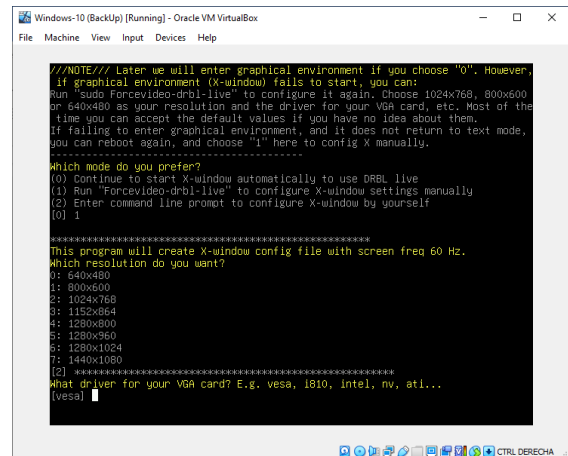


Ready to start the **VM**.

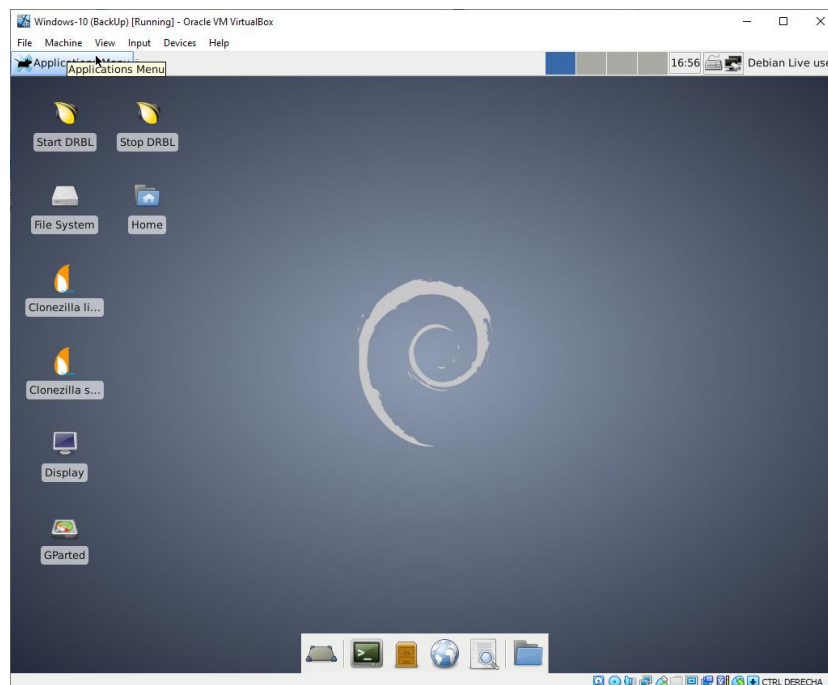
Select the VM > Click on **Start**.



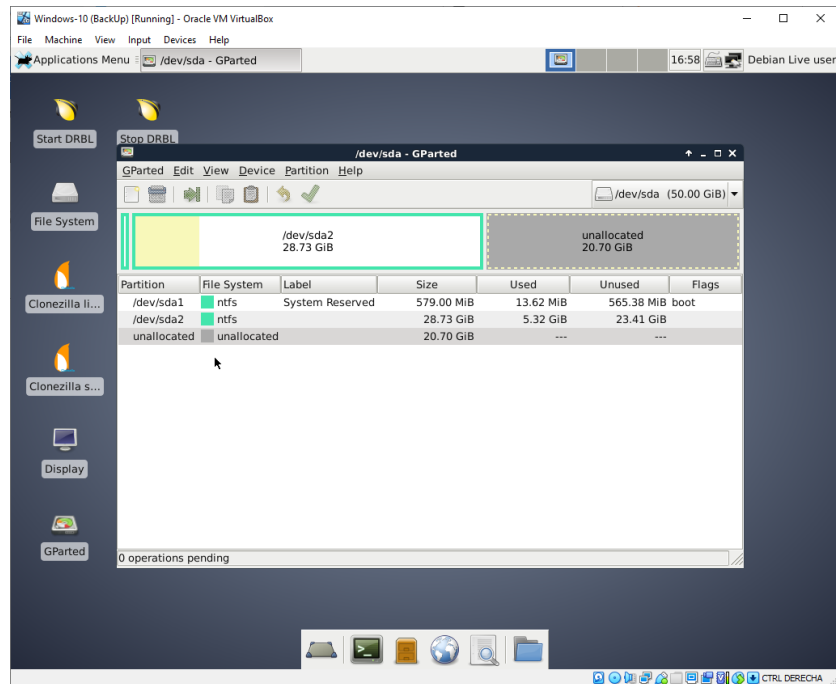
Select **DRBL Live (Default settings)**.



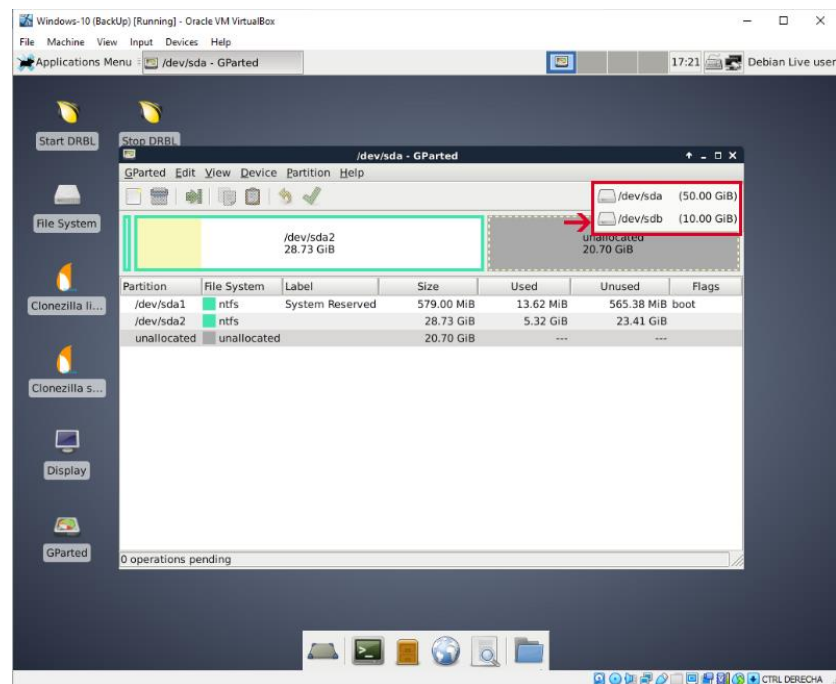
Rest of the options as default just press **Enter**.



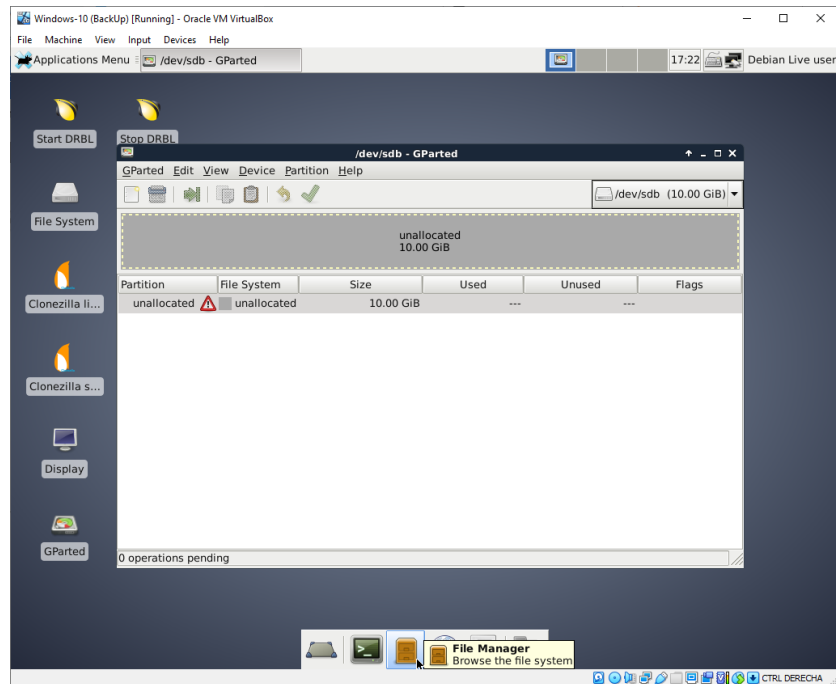
Debian Live user is running. **Double click on GParted** icon to open the program.



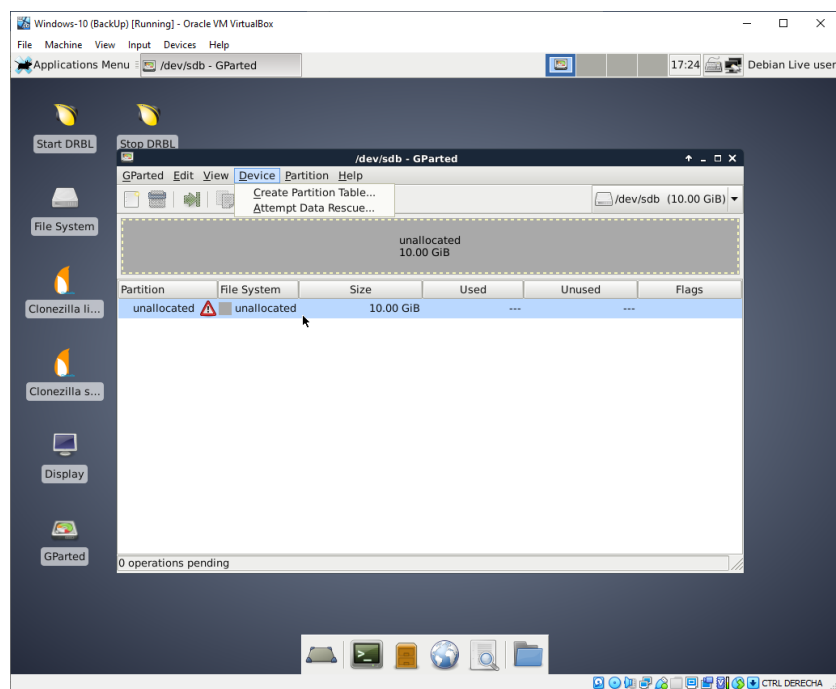
Gparted dashboard.



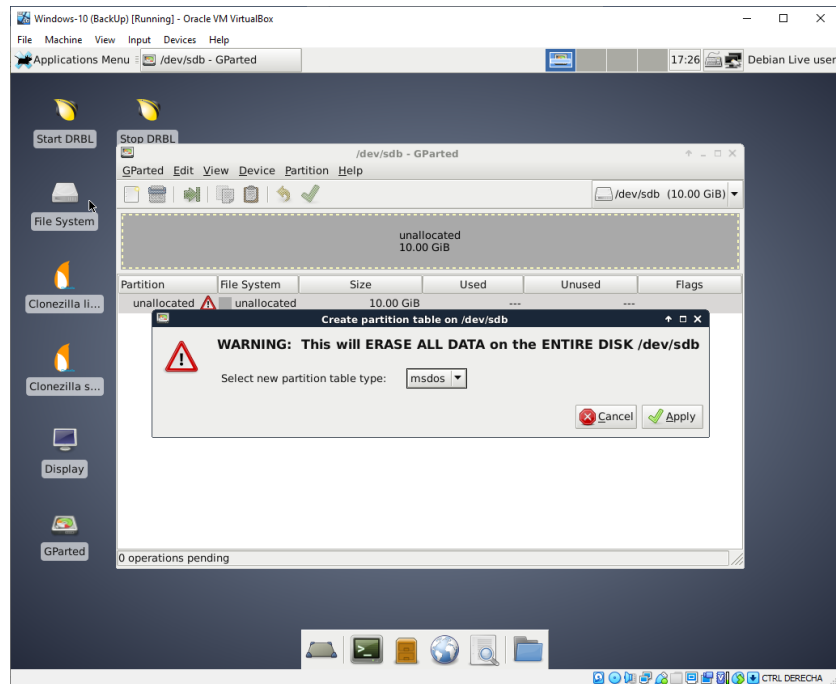
Now we need to **select the correct HD** with 10 GB > Click on Top right menu.



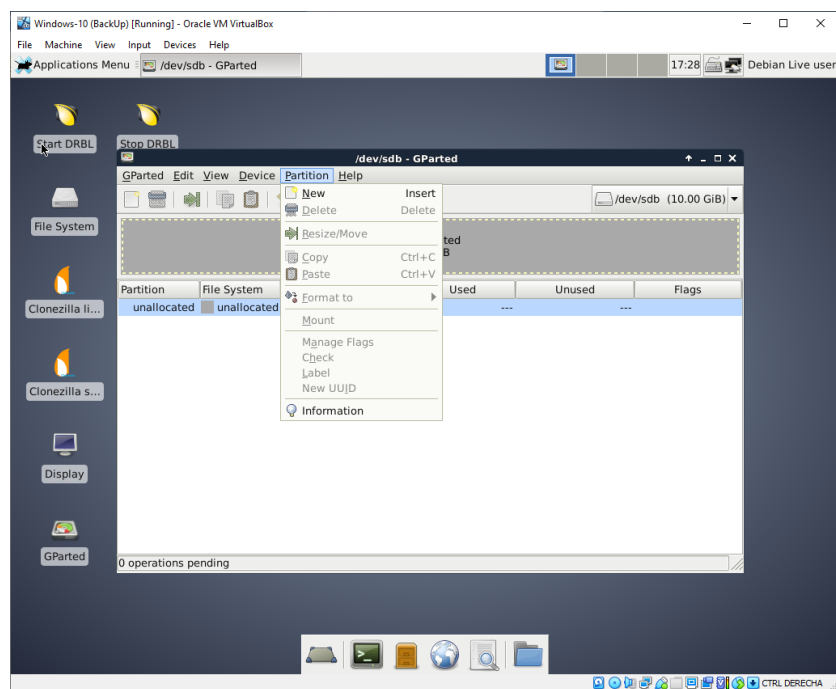
Once selected we can see that there are no partitions, just **unallocated space**.



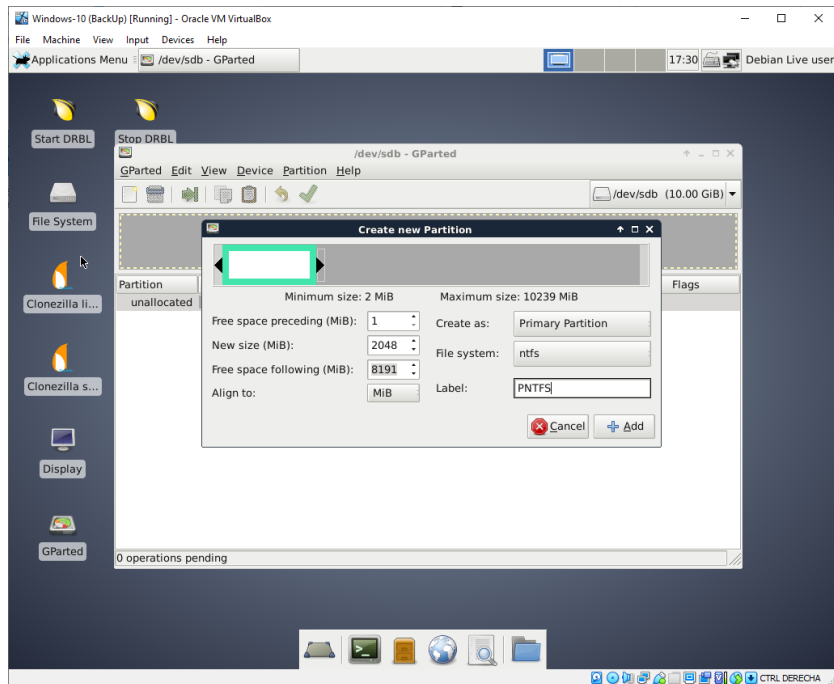
First, we need to create the partition table. Select **Menu > Device > Create Partition Table**.



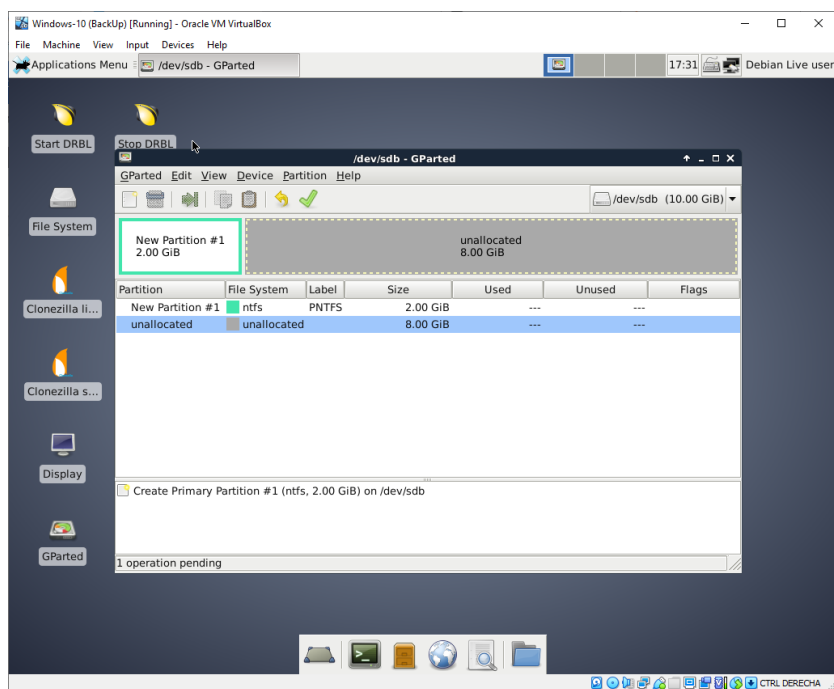
Select **msdos** > Click on **Apply**.



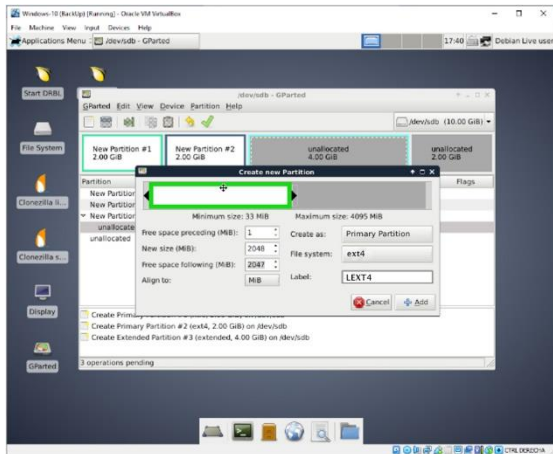
Create first Partition. Select the unallocated space > **Click on Partition > New**.



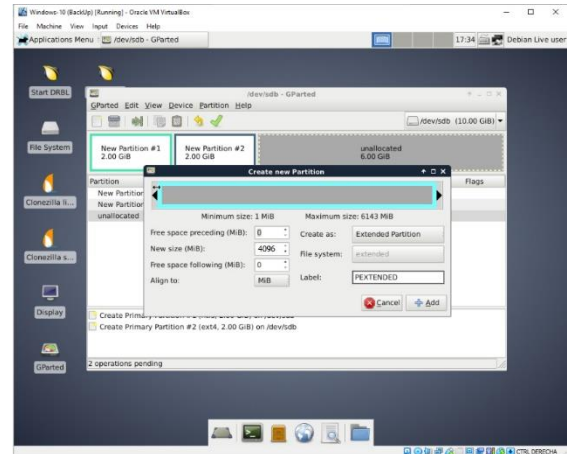
Configure first partition: **Primary Partition** of **2GB NTFS** file system and label **PNTFS** > Click on **Add**.



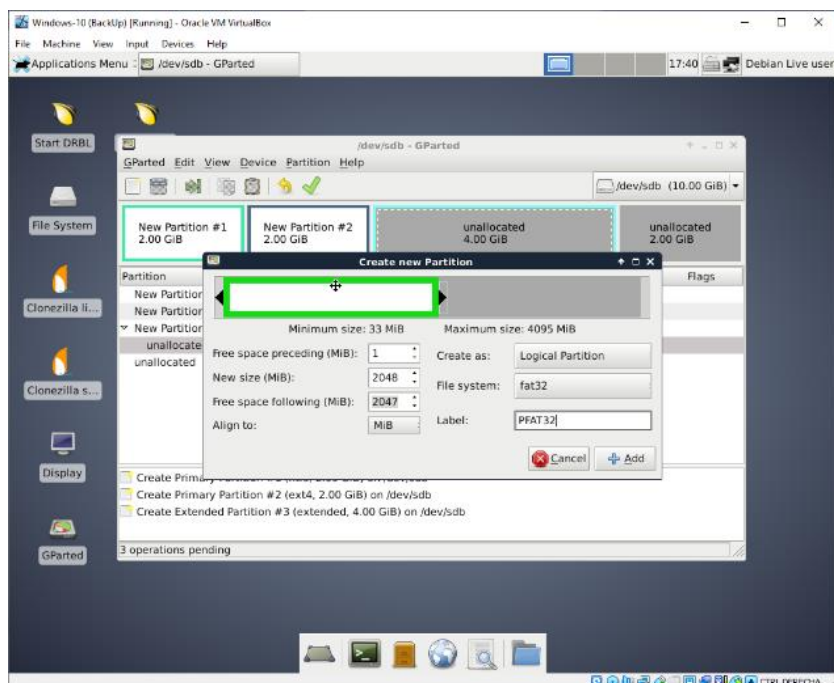
GParted overview.



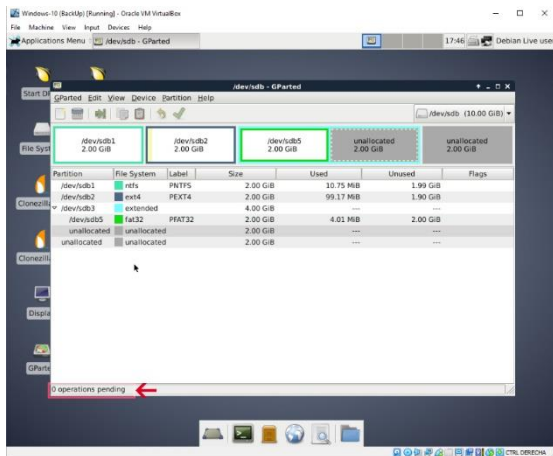
Primary partition 2GB ext4 file system label PEXT4



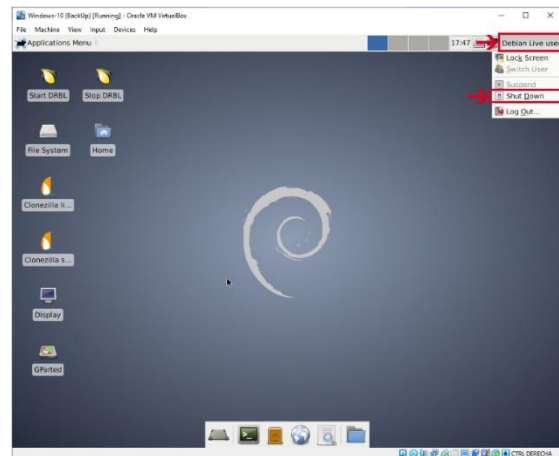
EXTENDED partition of 4 GB label PEXTENDED.



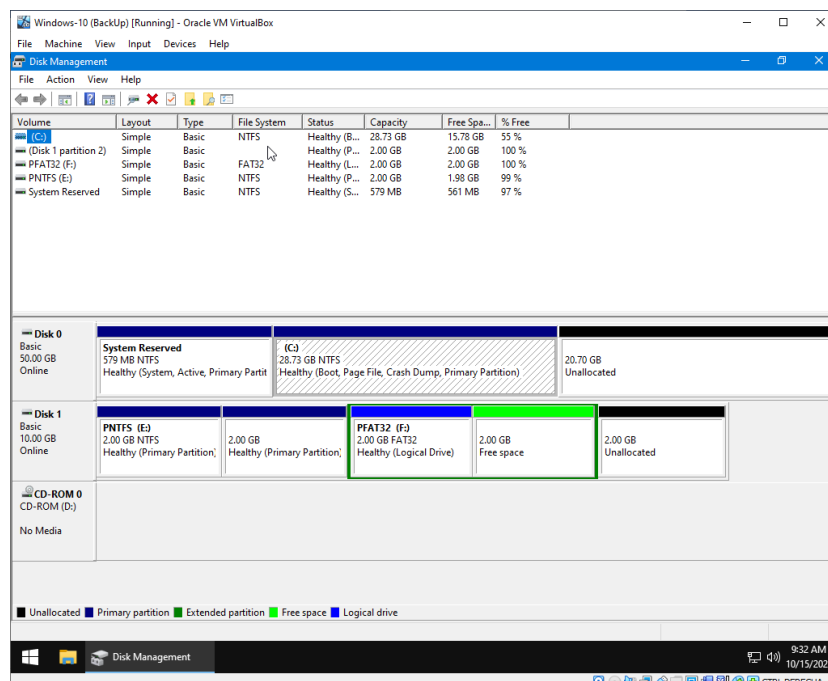
Logical partition 2 GB FAT32 file system and label PFAT32.



0 operations pending.



Close **Gparted** > Select **Shutdown**.



Run the VM > Open **Windows Disk Management**.
We have all the partitions created and their details.

QUESTIONS?

Why is the file system not showed in the second partition?

Because Windows doesn't recognise the Linux partition.

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 use the Extended partition as well as the free space at the end.

And the file system must be compatible with Windows like: NTFS, FAT16 or FAT32.