# CYSE 270: Linux System for Cybersecurity

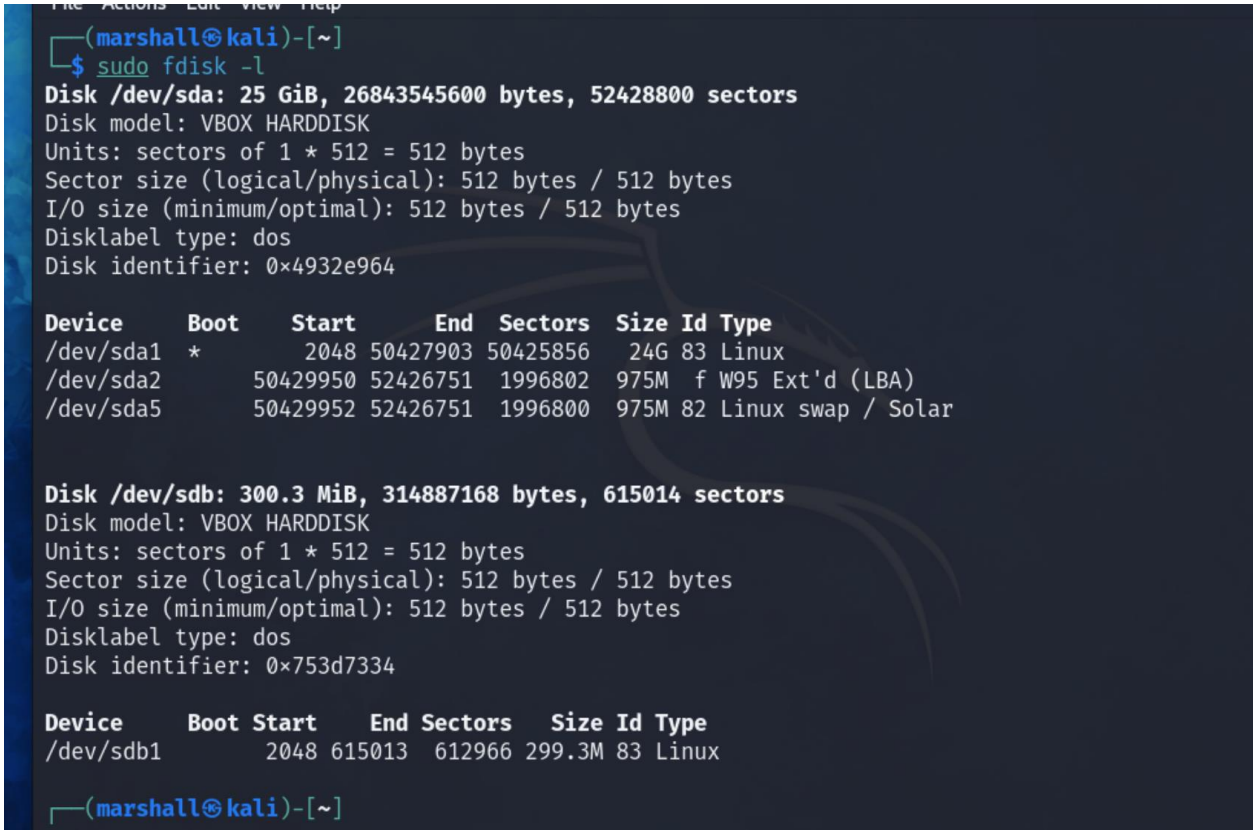
## Lab 7 – Manage Local Storage

## Part I– Check your file system (30 points).

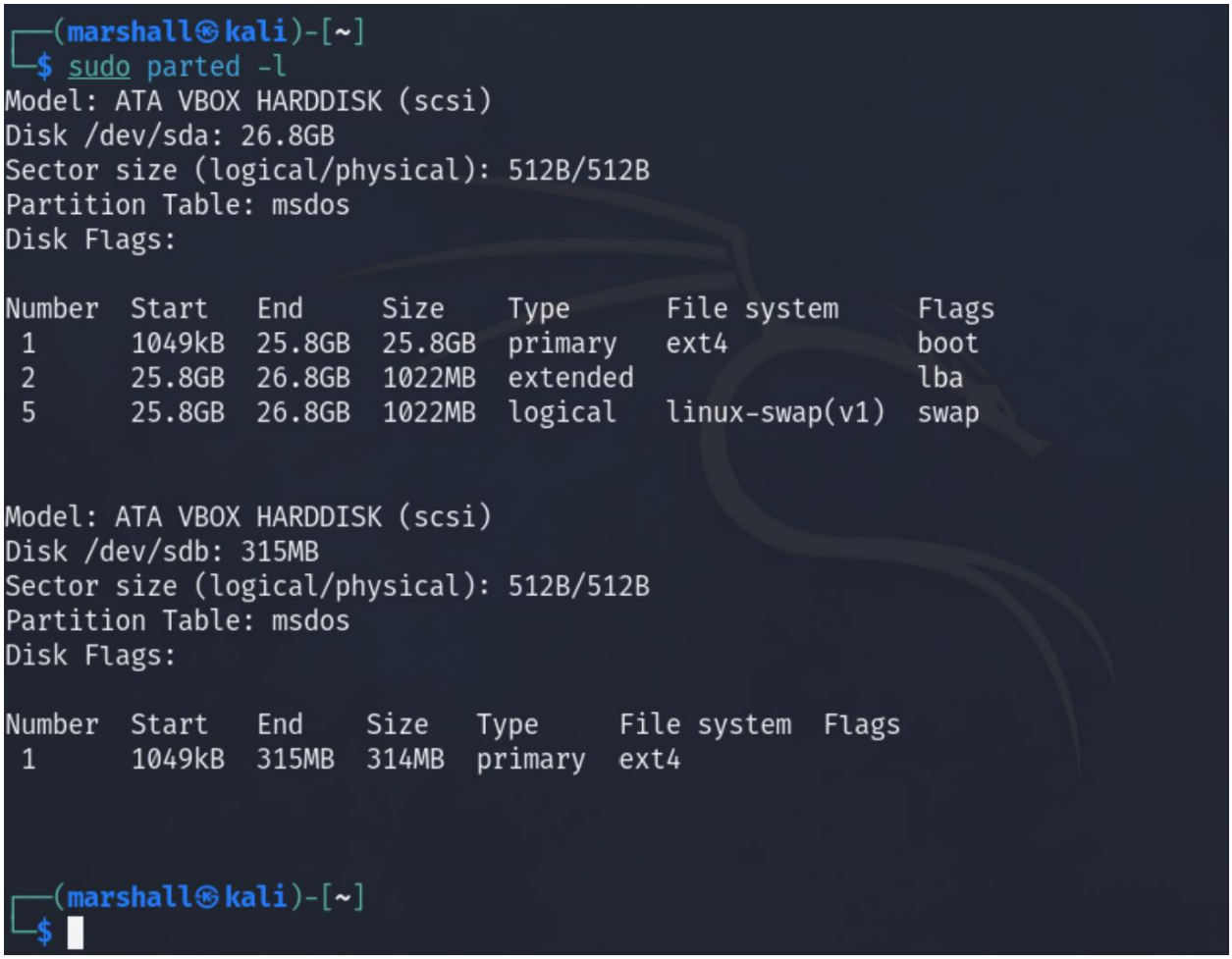
Submit the screenshot for All the three steps.

**Step 1.** Execute the **ls /dev/sd*** command to see the current hard disk devices. [use sudo ]


**Step 2.** Execute the **fdisk -l** command to list the current hard disk partitions. [use sudo ]



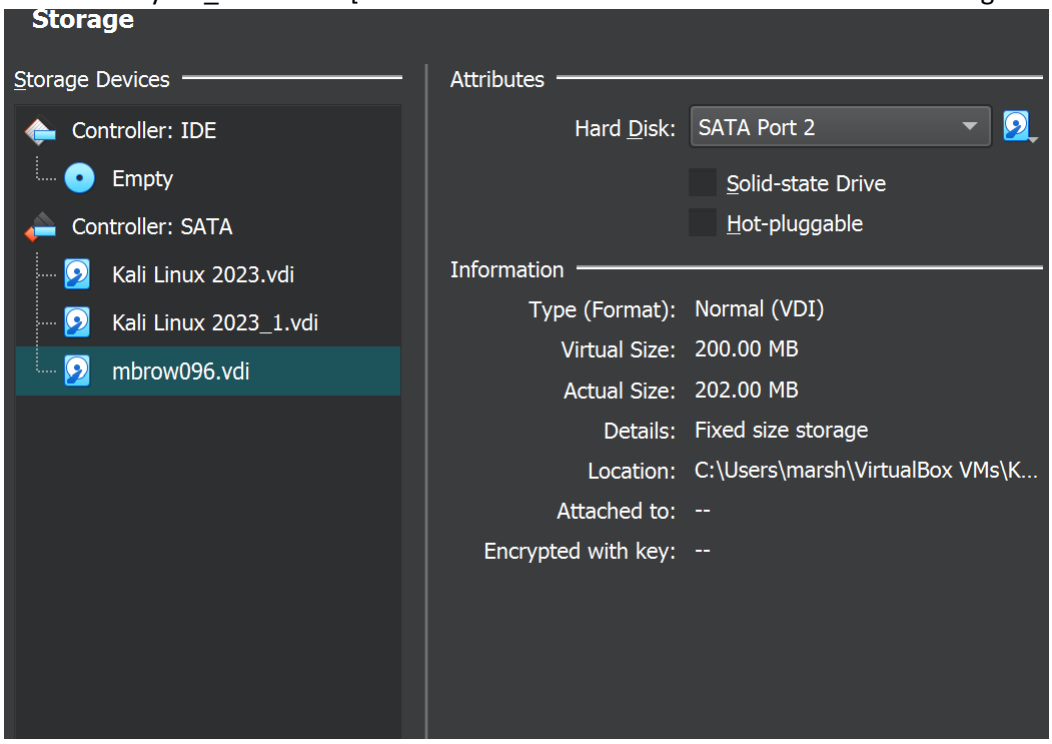
**Step 3.** Execute the **parted -l** command to list the current hard disk partition table. [use sudo ]



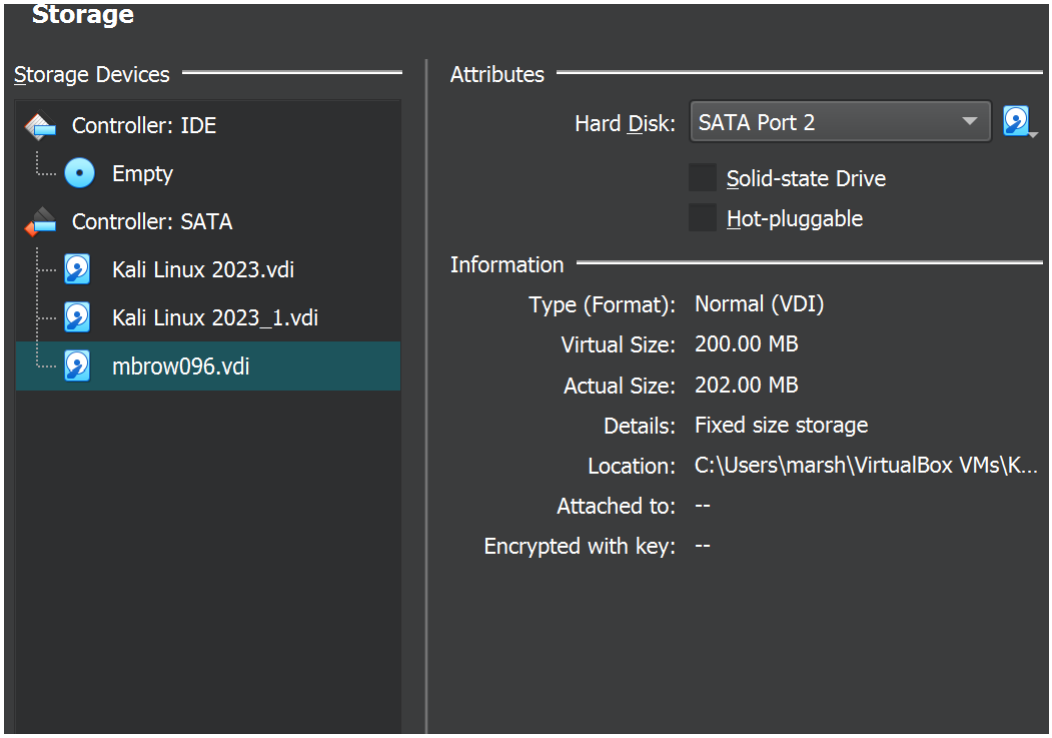

**Part II– Create a new virtual disk (30 points)**

Submit the screenshot for All the three steps.

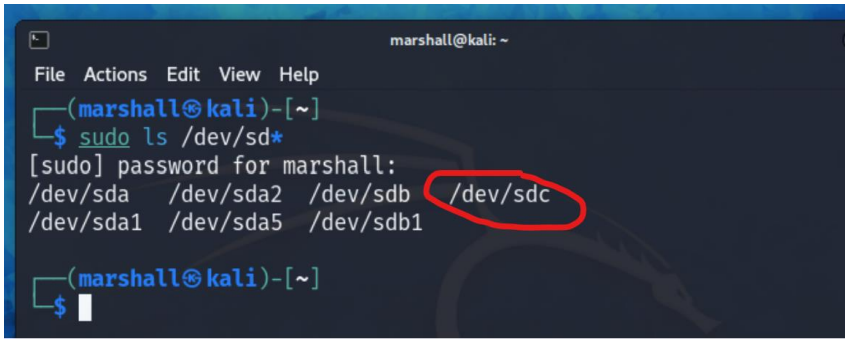
**Step 1.** In the VM setting, attach a new virtual hard disk with the size of 200 MB to our current Linux VM. Name it as "your_midas.vdi" [ **HINT:** Please refer to the slides and discussion during the class for week 7]

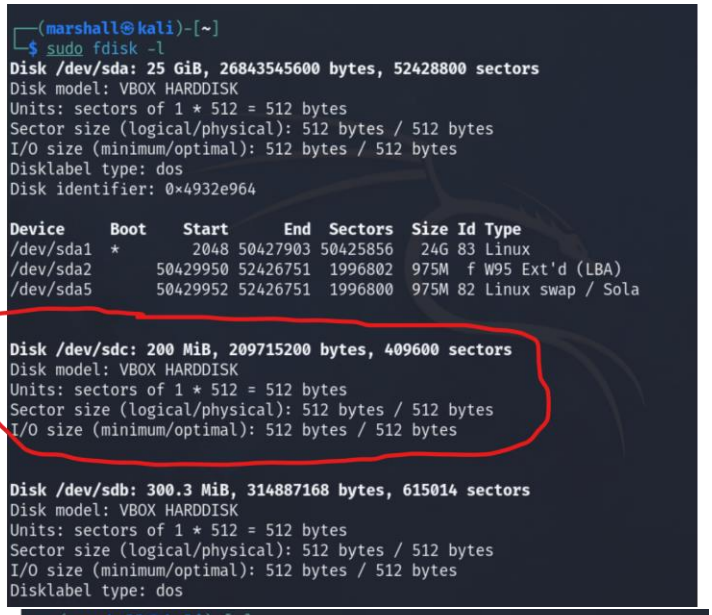


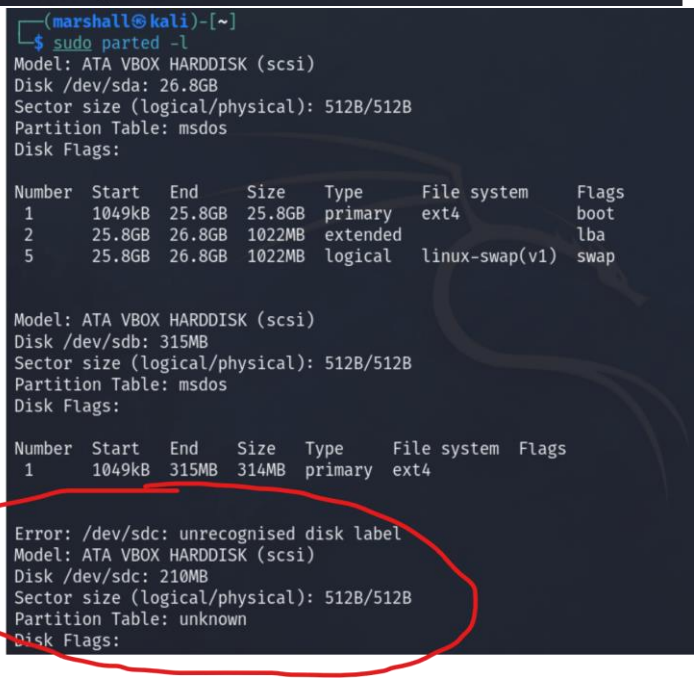

**Step 2.** Load this virtual hard disk to your virtual machine.



**Step 3.** **Repeat** the steps in Part I and **highlight the differences** after adding the new virtual hard disk.



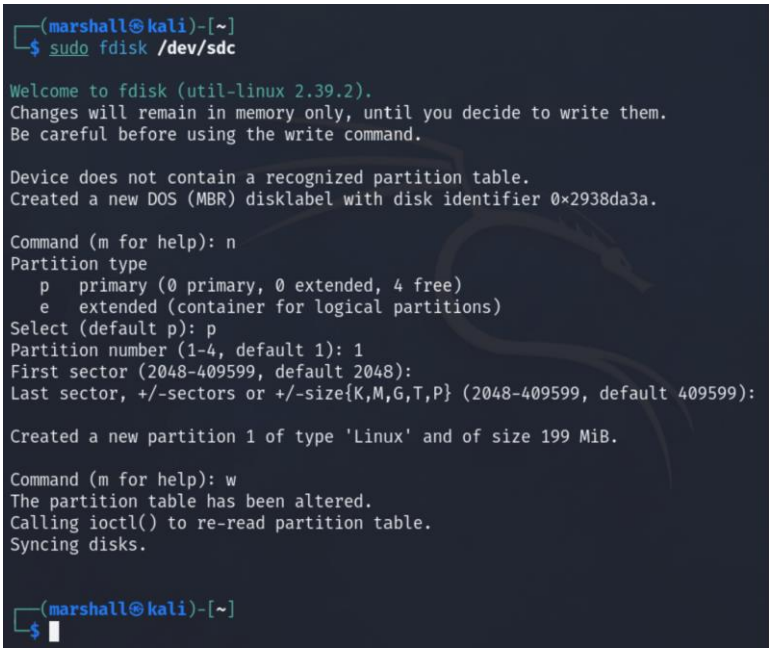



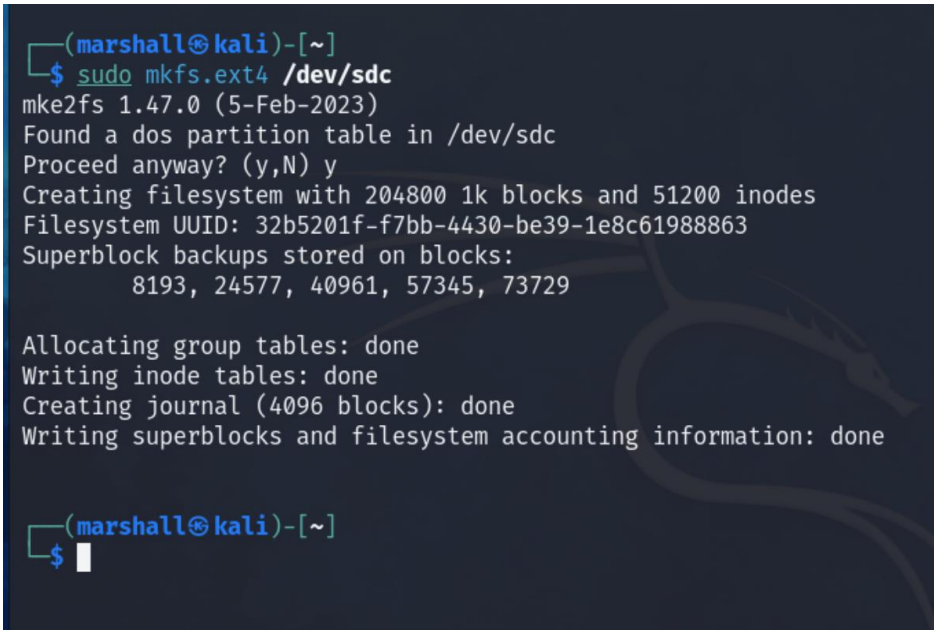
## Part III– Creating Partitions and Filesystems (60 points)

Submit the screenshot for All the three eight steps.

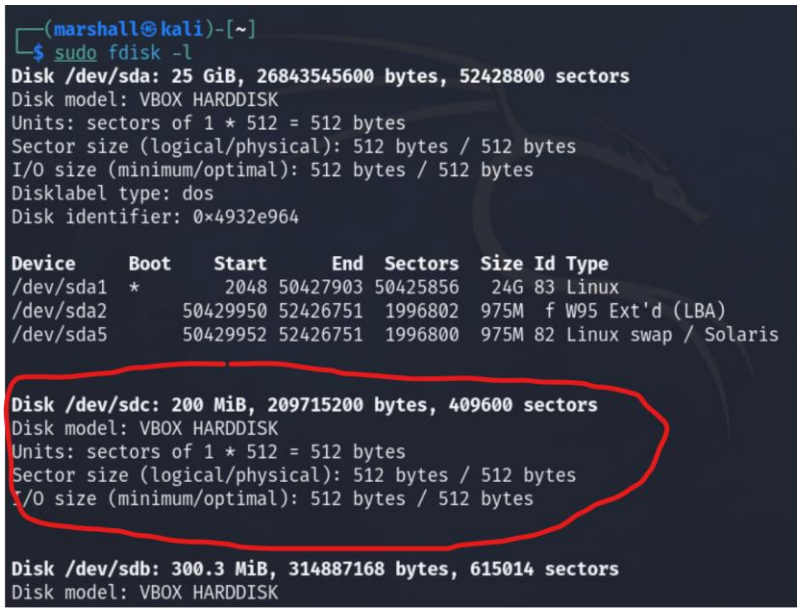
**Step 1.** Use the **fdisk** command to create a new primary partition on the new virtual hard disk attached in Part II.

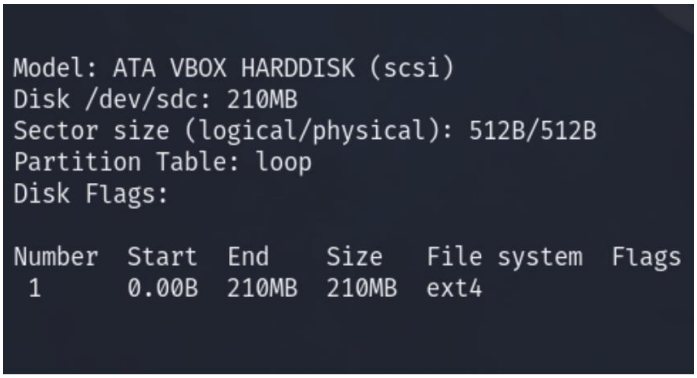



**Step 2.** Use the correct command to **create an ext4 filesystem** on the new partition.



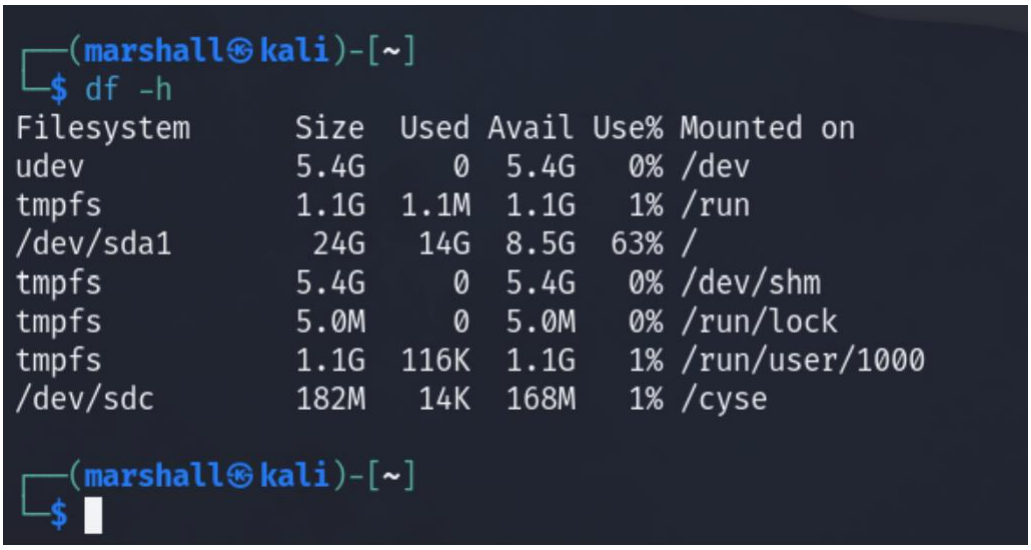
**Step 3.** **Repeat** the steps in Part I and highlight the differences.



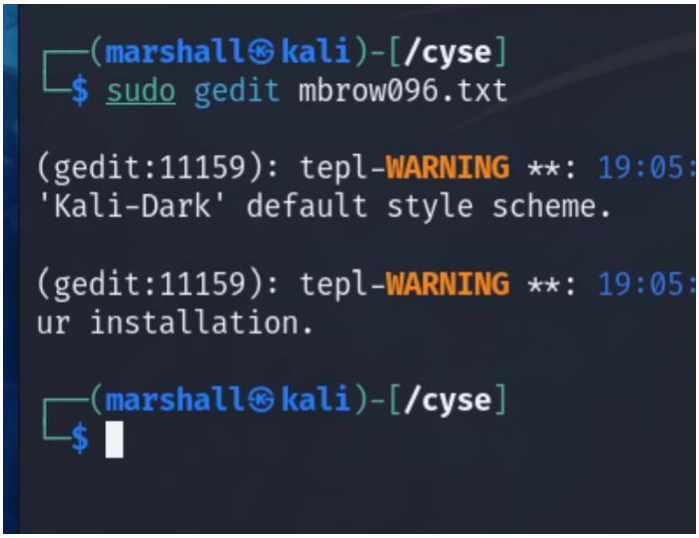




**Step 4.** Make a new directory named **/cyse**. And **mount** the new partition under this directory.

**Step 5.** Use the **df** command to check the mounting point of the new partition.




**Step 6.** Create a new file named for **YourMIDAS.txt** (replace YourMIDAS with your MIDAS ID) in the directory /cyse and put your name in that file.




**Step 7.** **Unmount** /cyse directory.

**Step 8.** Check the contents in /cyse directory. What do you find? There was my file I created earlier and a "lost+found" directory in there as well. But now it's empty: