

# **CYSE 270: Linux System for Cybersecurity**

## **Lab 7 – Manage Local Storage**

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### 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?