**lab4**

1. Use fdisk -l to locate information about the partition sizes.

* fdisk -i

2. Use fdisk to add a new logical partition that is 1GB in size.

Step1: sudo fdisk /dev/nvme0n1p6

Step2: n //to create new logical partition

Step3: e //to make it extended

3. Did the kernel feel the changes?

No

Display the content of /proc/partitions file?

What did you notice?

new partition not listed

How to overcome that?

Reboot the system

4. Make a new ext2 file system on the new logical partition you just created.

Bonus: Try creating the ext2 filesystem with 2k blocks and one inode per

every 4k (two blocks) of filesystem.

Mkfs.ext4 /dev/ nvme0n1p3

5. Create a directory, name it /data.

sudo mkdir /data

6. Add a label to the new filesystem, name it data.

e2label /dev/nvme0n1p3

7. Add a new entry to /etc/fstab for the new filesystem using the label you just

create.

8. Mount the new filesystem.

mount /dev/nvme0n1p3 /data

9. Display your swap size.

Swapon -s

10. Create a swap file of size 512MB.

11. Add the swap file to the virtual memory of the system.

12. Display the swap size

13. Implement disk quotas for users on the /home directory by taking the following actions

a. Edit /etc/fstab and add the usrquota option to the /home filesystem

b. Remount the filesystem with the command mount -o remount /home

quotacheck /home

c. Use the quotacheck command to create the quota-tracking file

quotacheck /home

d. Use the quotaon command to enable quota tracking by the kernel quotaon /home