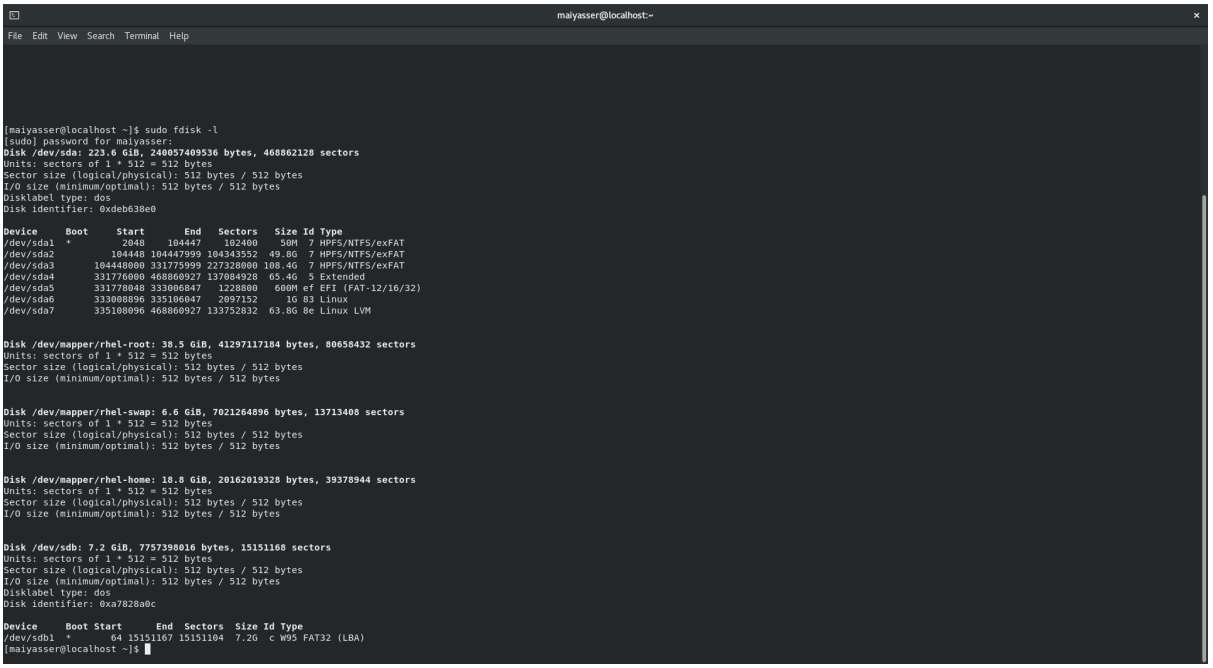
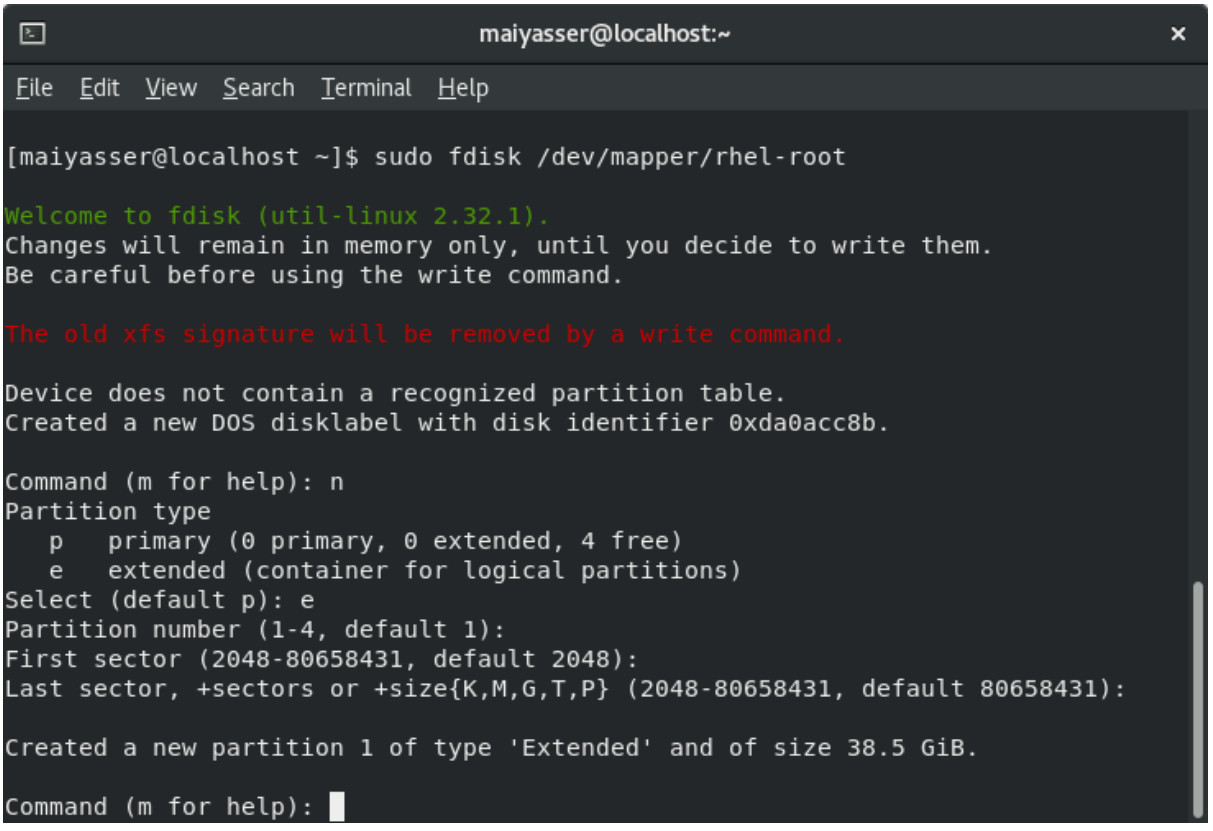
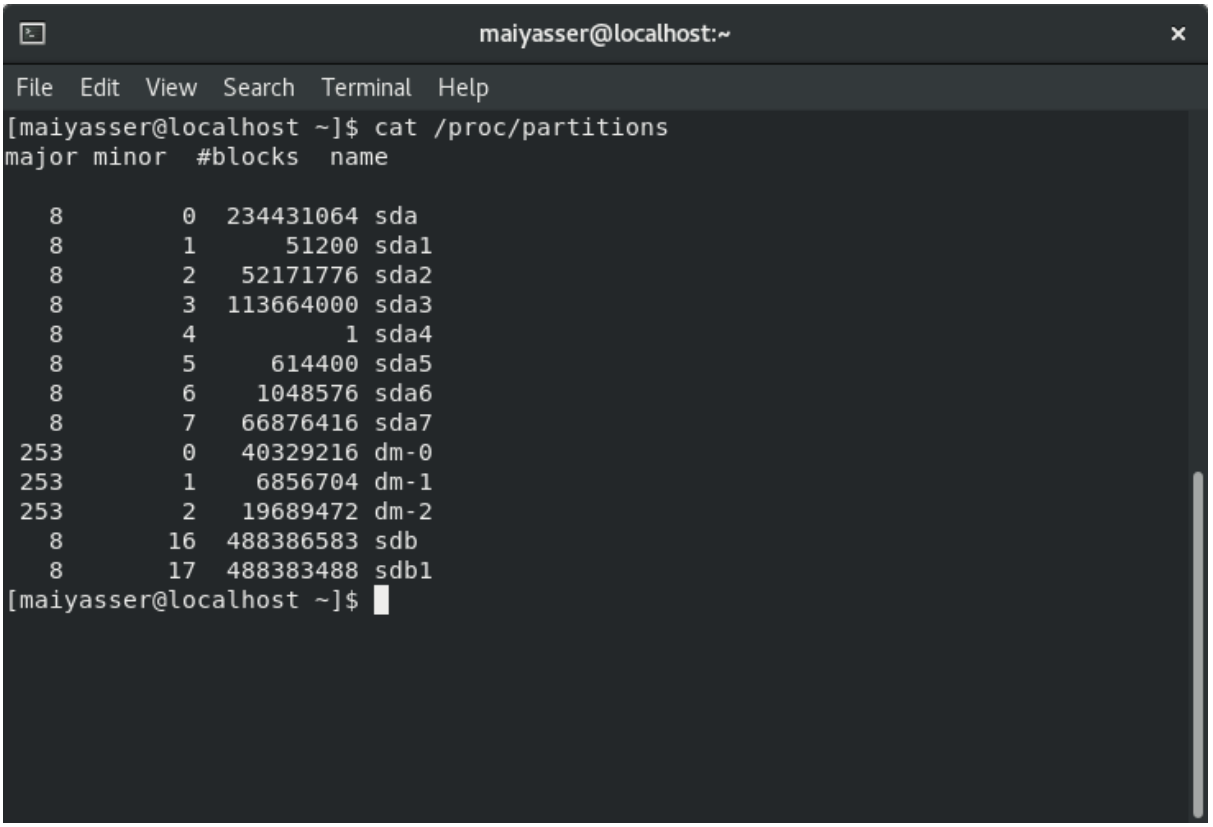
1. Use fdisk -l to locate information about the partition sizes.



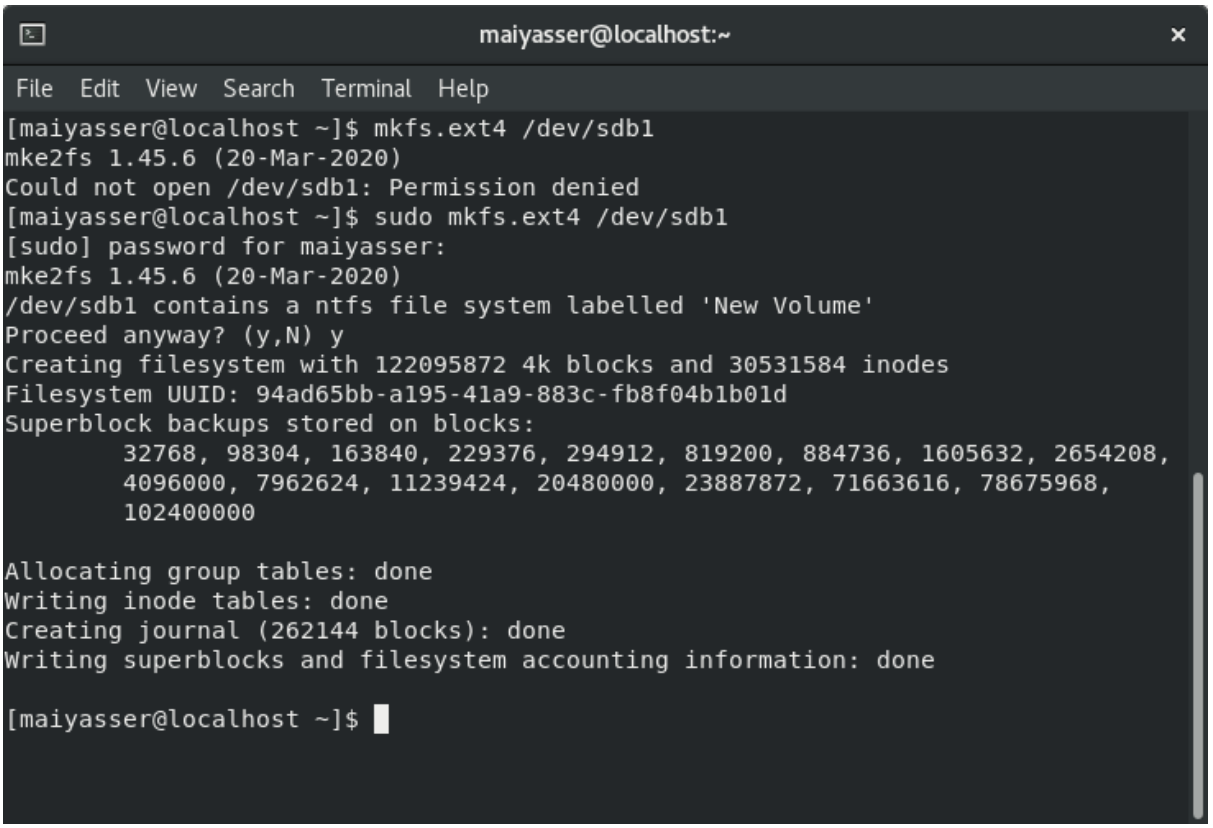
2. Use fdisk to add a new logical partition that is 1GB in size.



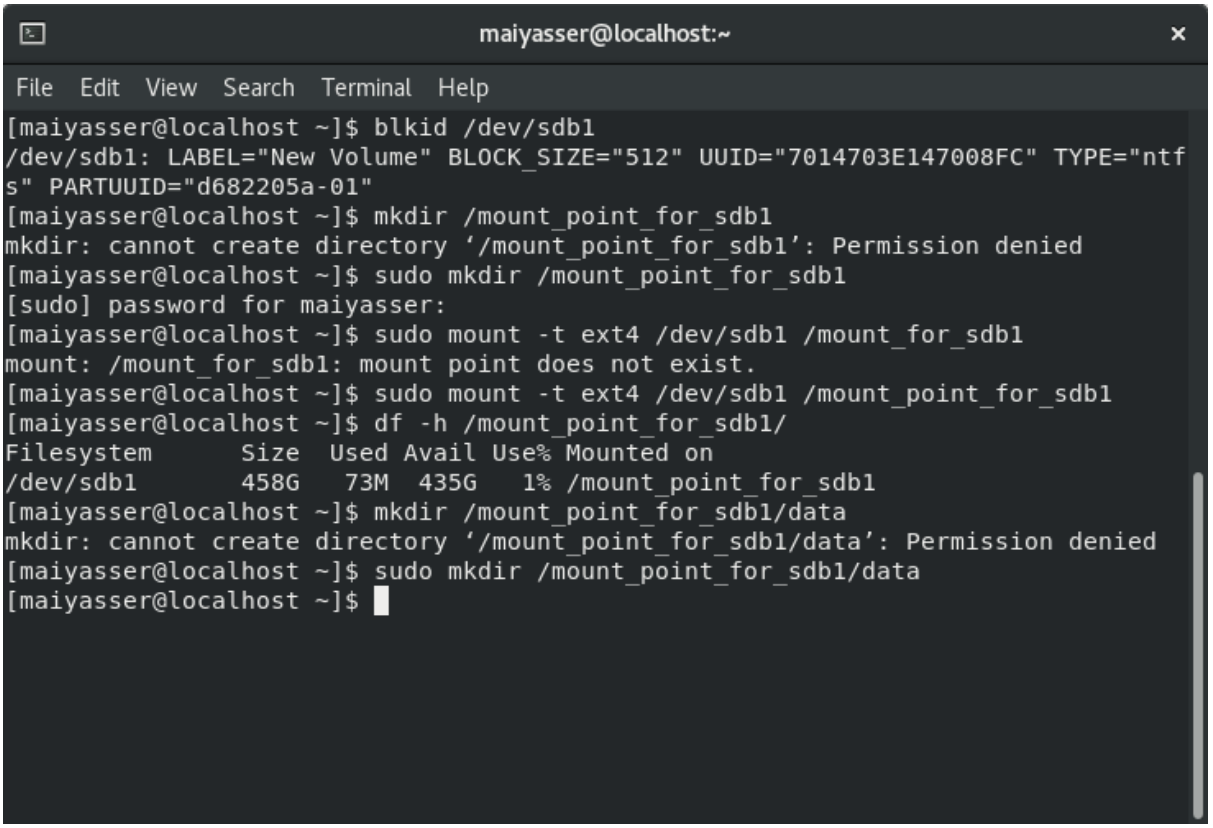
3. Did the kernel feel the changes? No
Display the content of /proc/partitions file?
What did you notice? The new partition is not there
How to overcome that? reboot



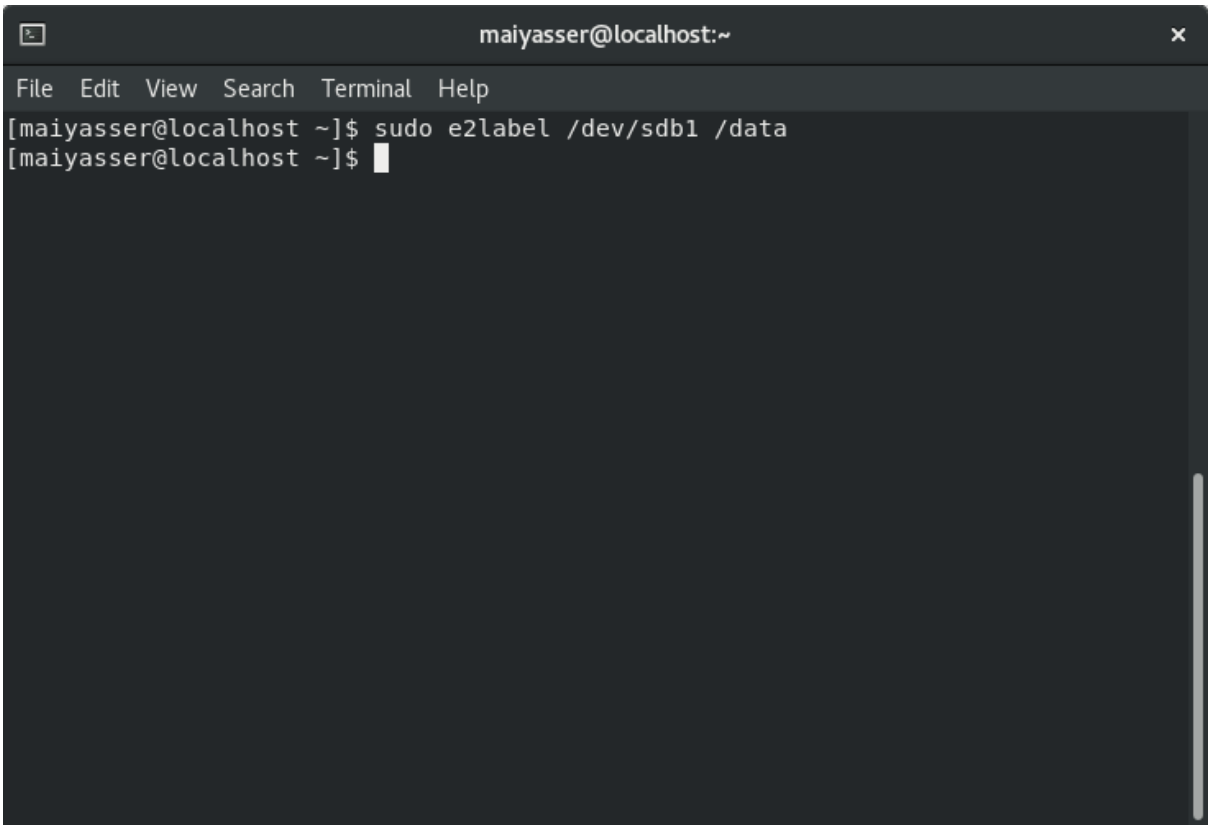
4. Make a new ext2 file system on the new logical partition you just created.
Bonus: Try creating the ext2 filesystem with 2k blocks and one inode per every 4k (two blocks) of filesystem.



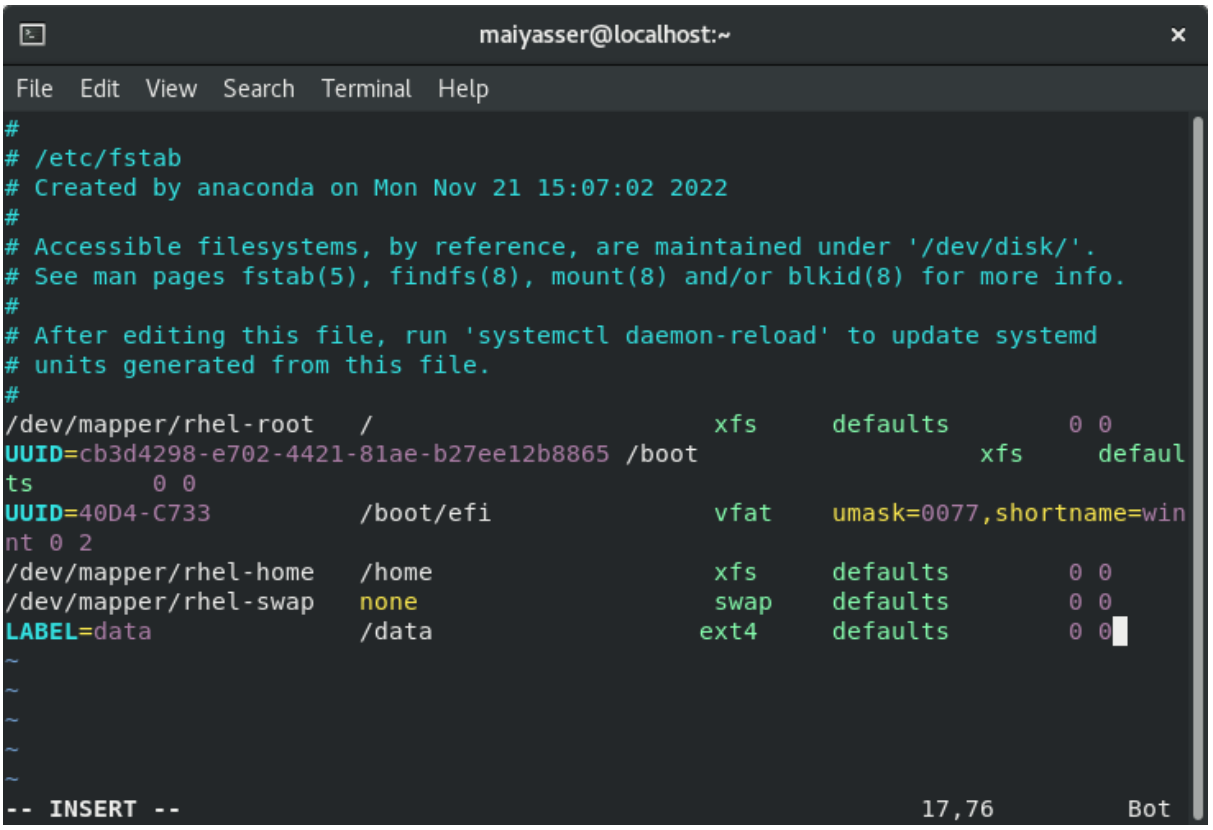
5. Create a directory, name it /data.



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

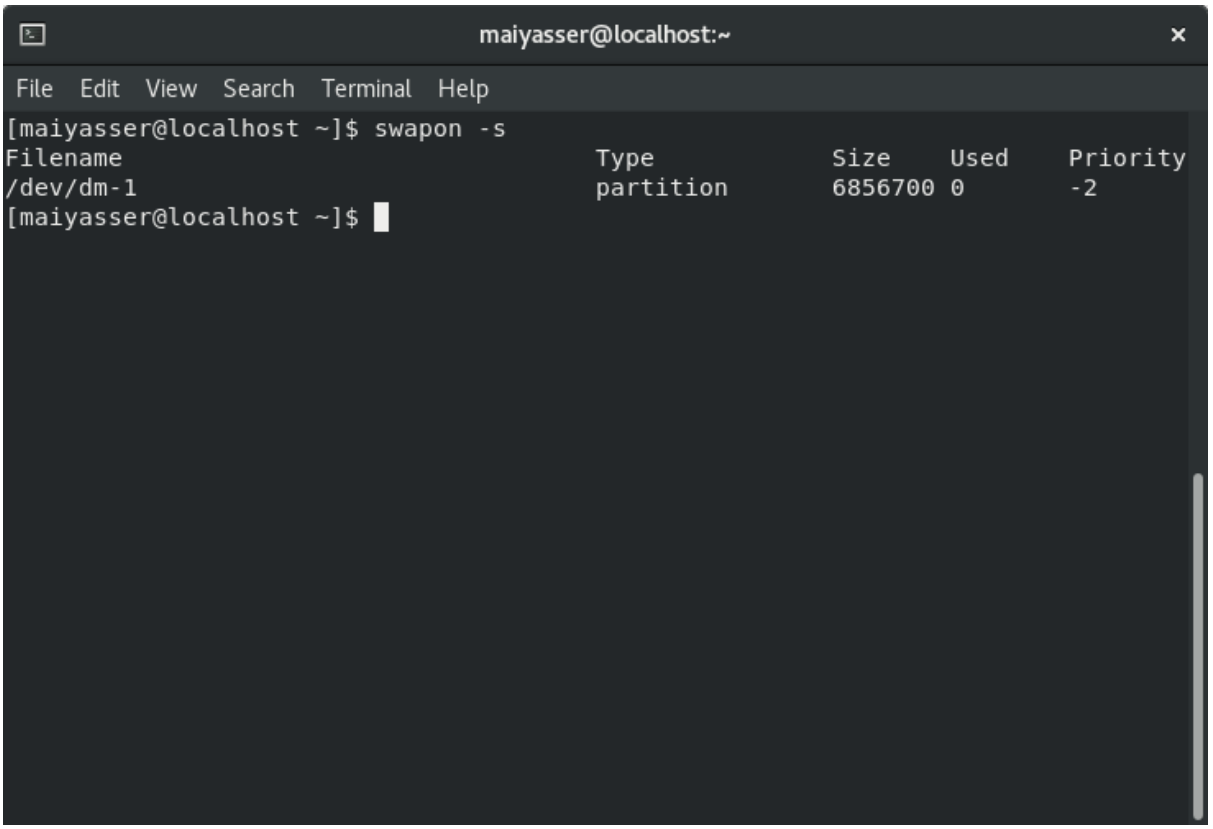


7. Add a new entry to /etc/fstab for the new filesystem using the label you just create.



8. Mount the new filesystem.
mount /dev/sdb1 /data

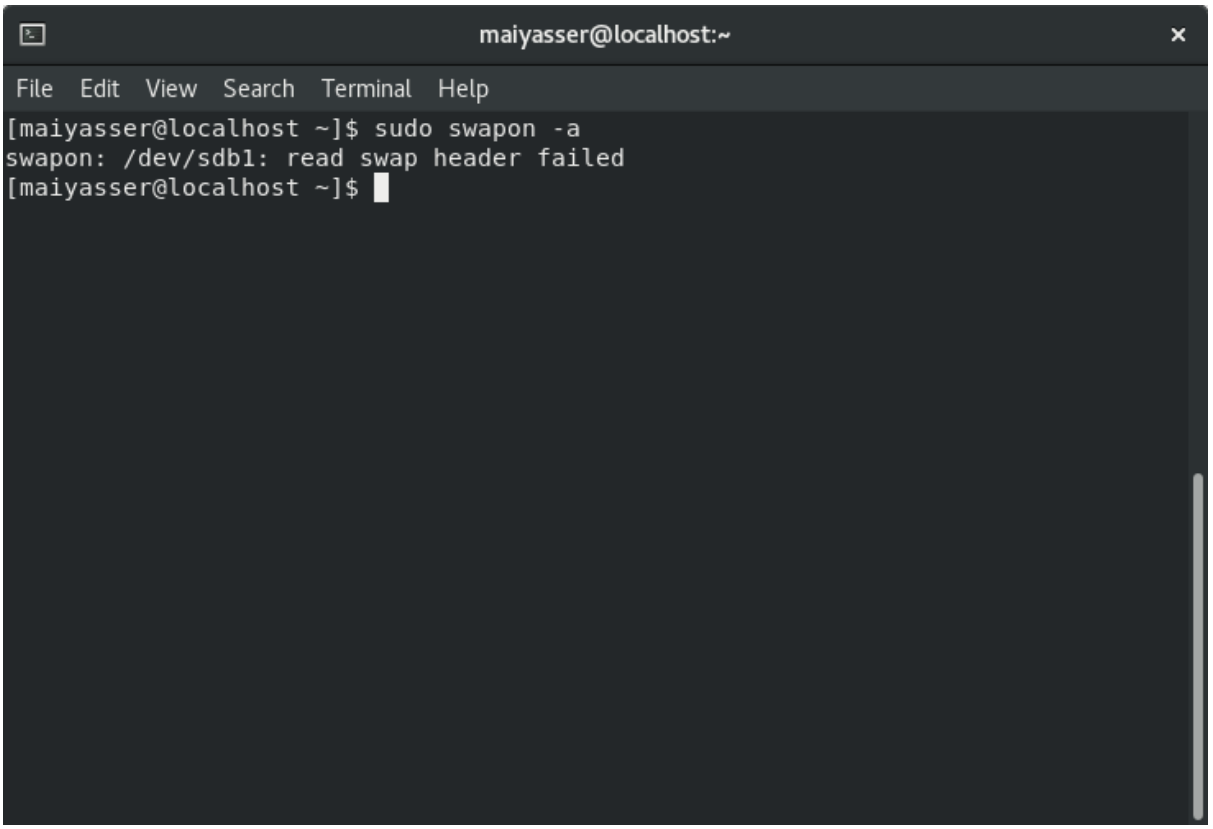
9. Display your swap size.



10. Create a swap file of size 512MB.

LABEL=SWAP-sdb1 swap swap defaults 0 0

mkswap /dev/sdb1



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
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