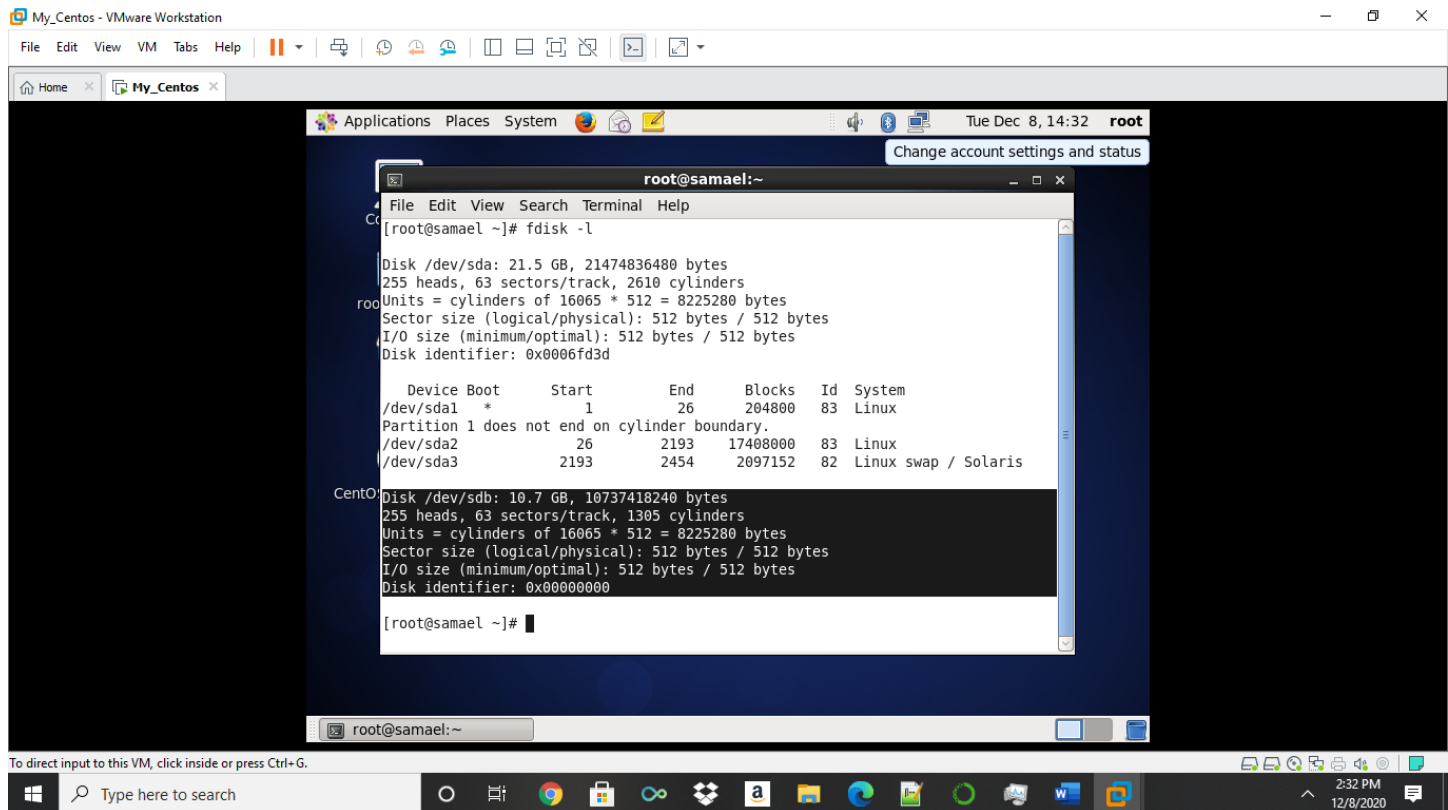


# ASSIGNMENT DAY-5

## Question 1:

1. Add a 10GB disk to the CentOS.

First add a disk in vm edit section then type `fdisk -l` you can see the 10.7 GB extra disk



```
My_Centos - VMware Workstation
File Edit View VM Tabs Help
Home My_Centos
Applications Places System
Tue Dec 8, 14:32 root
Change account settings and status

root@samael:~
File Edit View Search Terminal Help
[root@samael ~]# fdisk -l

Disk /dev/sda: 21.5 GB, 21474836480 bytes
255 heads, 63 sectors/track, 2610 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x0006fd3d

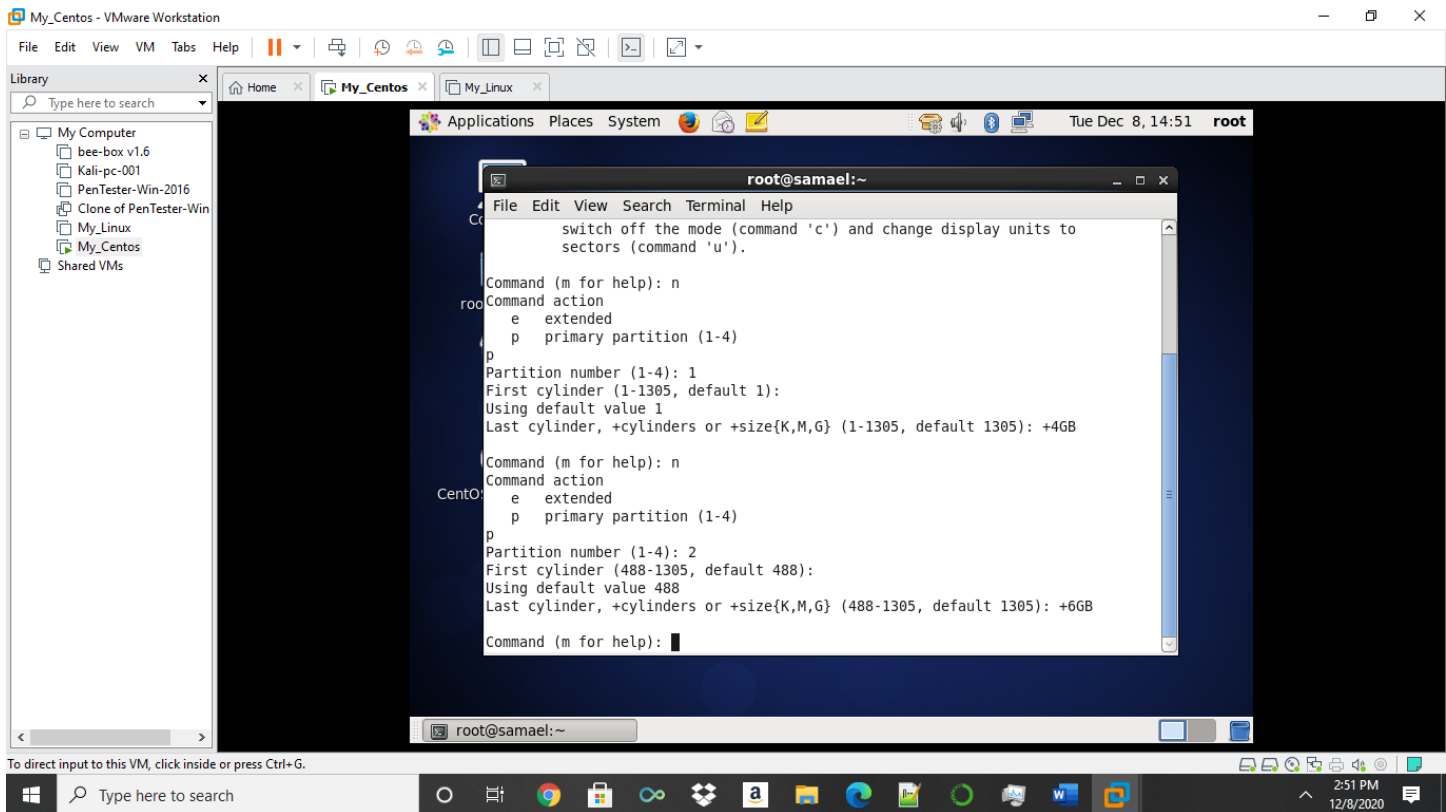
   Device Boot      Start         End      Blocks   Id  System
/dev/sda1  *           1           26       204800    83  Linux
Partition 1 does not end on cylinder boundary.
/dev/sda2                26        2193       17408000    83  Linux
/dev/sda3            2193        2454        2097152    82  Linux swap / Solaris

CentOS Disk /dev/sdb: 10.7 GB, 10737418240 bytes
255 heads, 63 sectors/track, 1305 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00000000

[root@samael ~]#
```

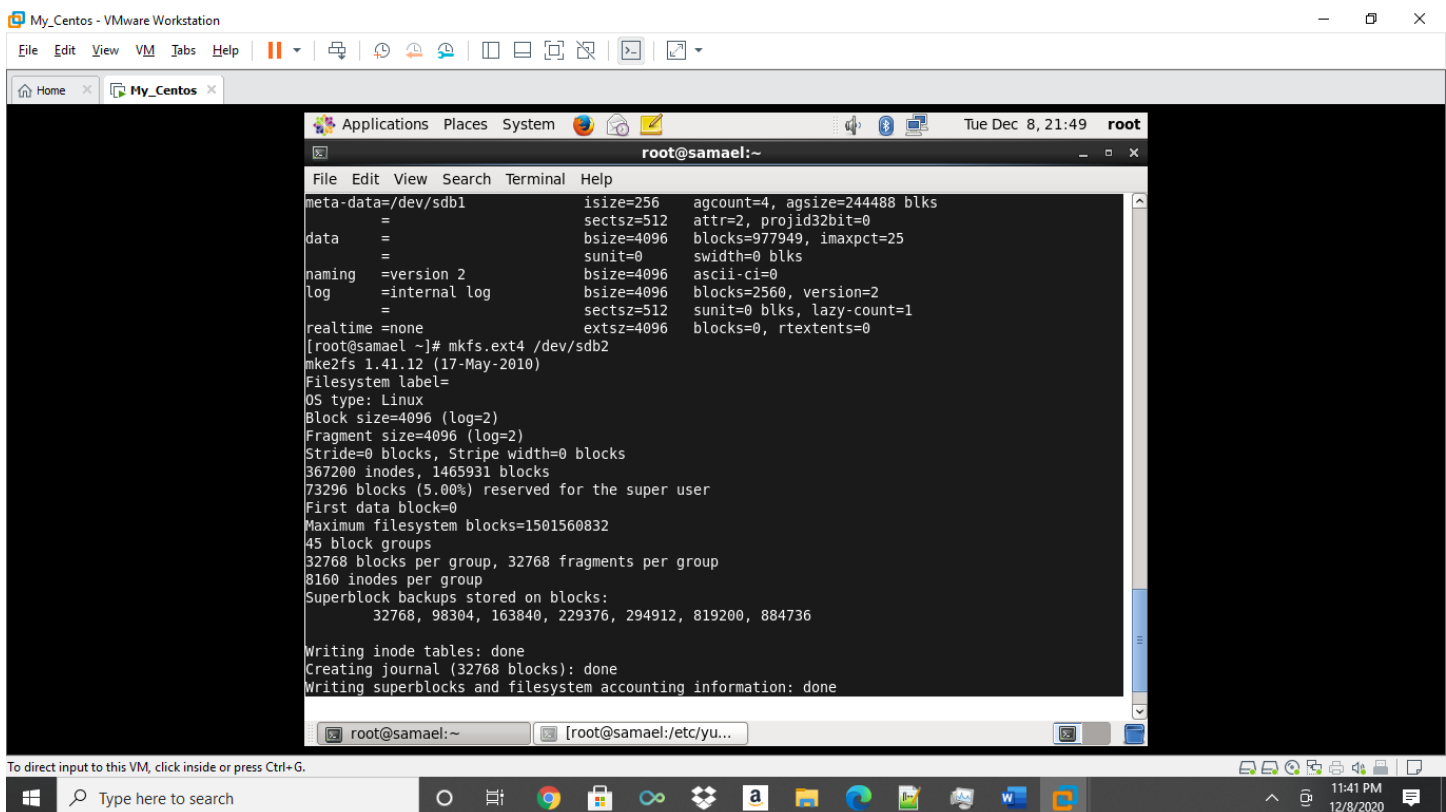
2. Create 2 Partitions 4GB and 6GB of Space respectively.

Use this command `fdisk /dev/sdb` then you will get command lines then press `n` for making the partition of new disk. then add 4gb and 6gb with respectively by continuing the process and then save it by pressing `w`.



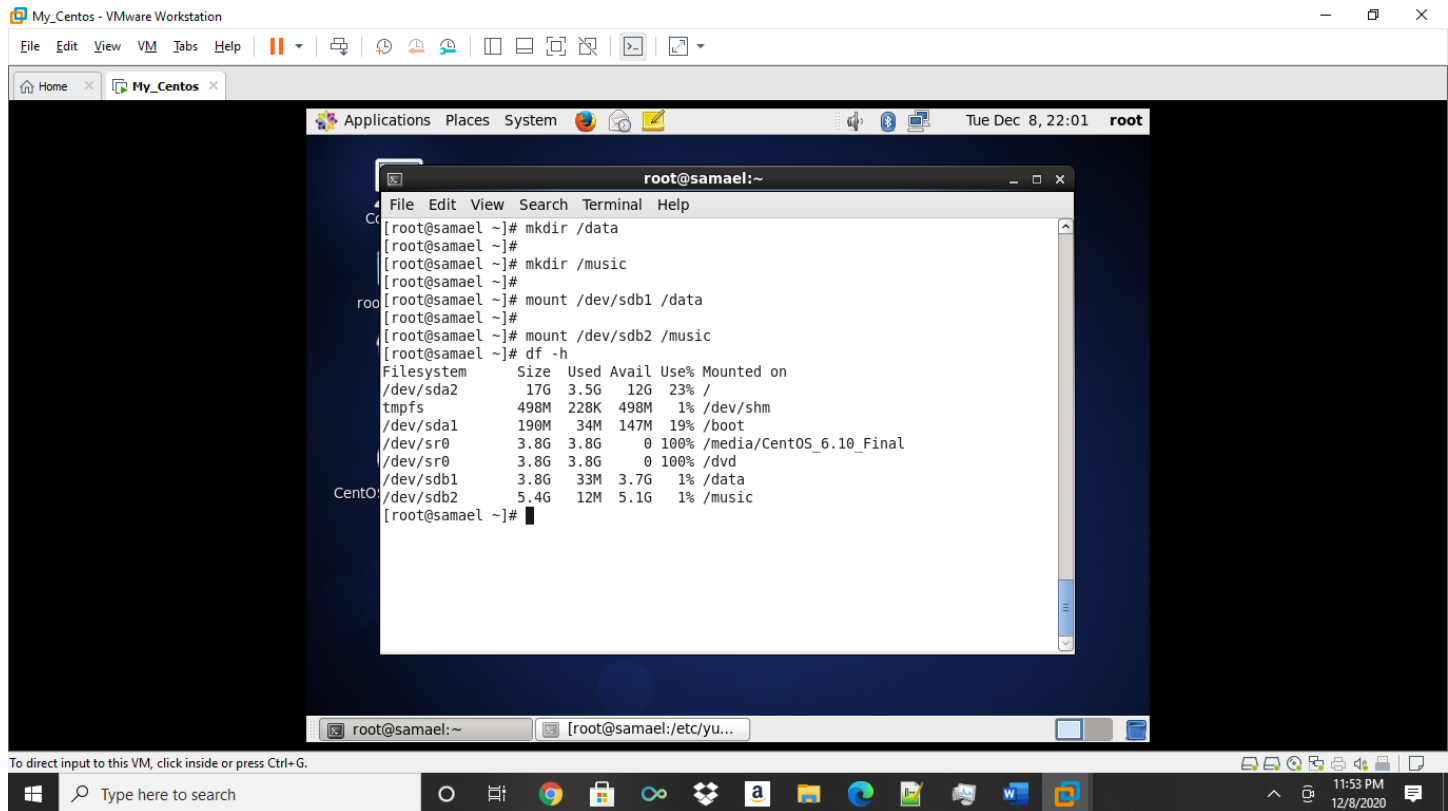
### 3. Format 4GB with xfs and 6GB with ext4 file system.

First we install xfs then execute the command `mkfs.xfs /dev/sdb1` for formatting 4GB and for 6GB command is `mkfs.ext4 /dev/sdb2`.



4. Mount 4GB and 6GB in /data and /music directory respectively.

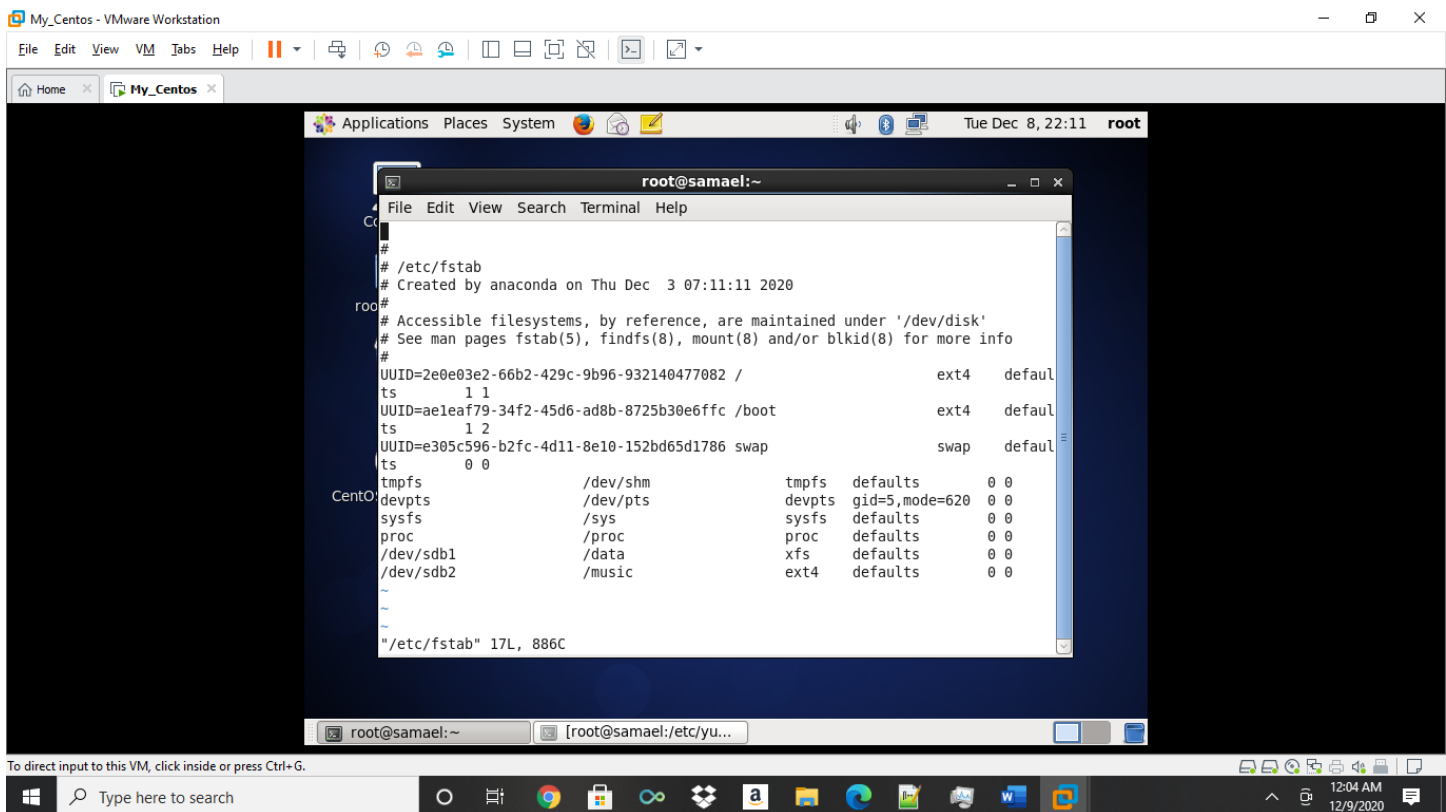
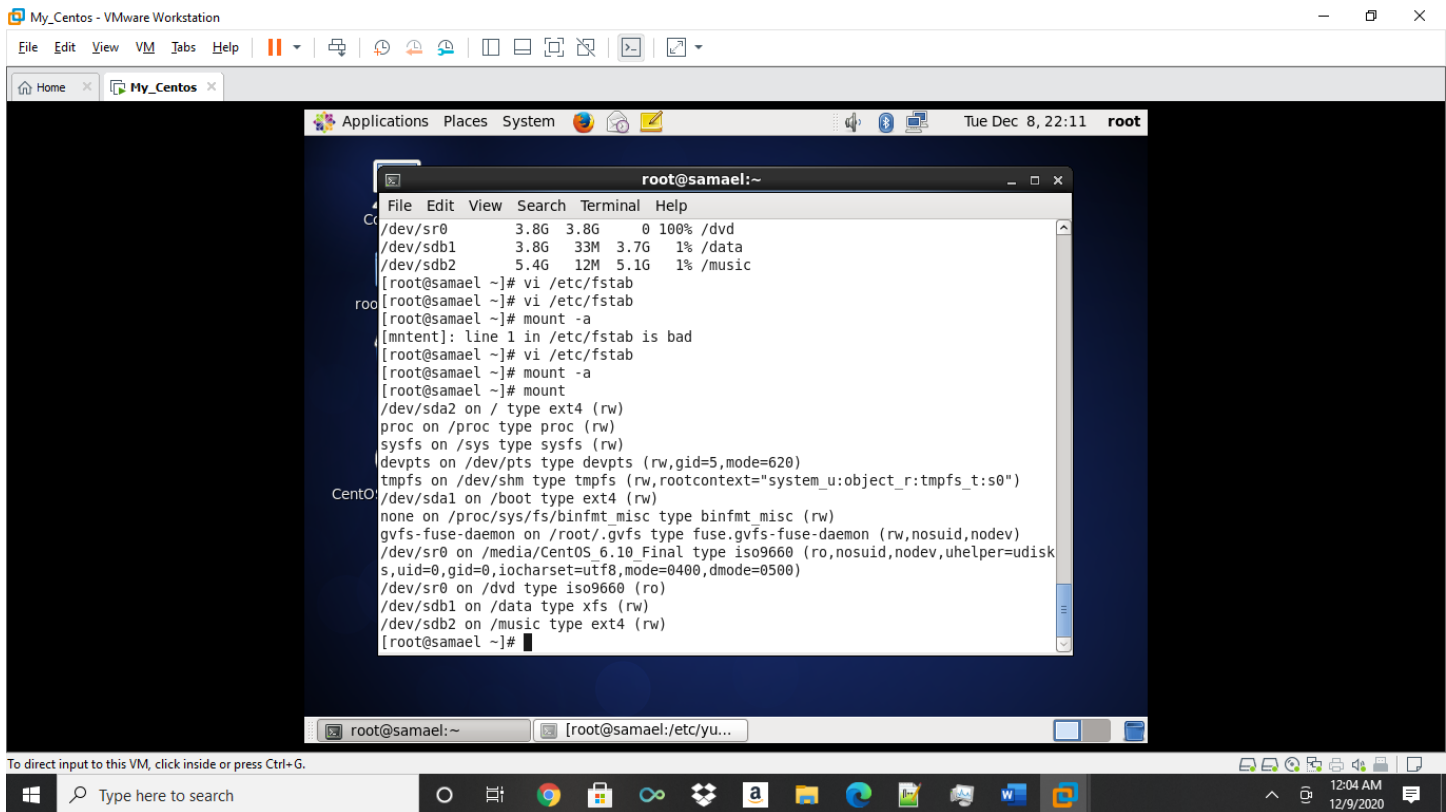
First we make two directories named data and music for two disks command is `mkdir /data` and `mkdir /music`. Then we mount them by the command `mount /dev/sdb1 /data` and `mount /dev/sdb2 /music`. Then we check by `df -h`. this is for temporary



```
root@samael:~  
[root@samael ~]# mkdir /data  
[root@samael ~]#  
[root@samael ~]# mkdir /music  
[root@samael ~]#  
[root@samael ~]# mount /dev/sdb1 /data  
[root@samael ~]#  
[root@samael ~]# mount /dev/sdb2 /music  
[root@samael ~]# df -h  
Filesystem      Size  Used Avail Use% Mounted on  
/dev/sda2        17G   3.5G   12G   23% /  
tmpfs            498M  228K  498M    1% /dev/shm  
/dev/sda1        190M   34M  147M   19% /boot  
/dev/sr0         3.8G   3.8G    0 100% /media/CentOS_6.10_Final  
/dev/sr0         3.8G   3.8G    0 100% /dvd  
/dev/sdb1        3.8G   33M   3.7G    1% /data  
/dev/sdb2        5.4G   12M   5.1G    1% /music  
[root@samael ~]#
```

For permanently

Open `vi /etc/fstab` then add `/dev/sdb1 /data xfs defaults 0 0` and `/dev/sdb2 /music ext4 defaults 0 0` then quit insert mode and check for successful mount and the command is `mount -a` and then use `mount` command and use `df -ah` to show directories .



```
root@samael:~  
File Edit View Search Terminal Help  
/dev/sda1 on /boot type ext4 (rw)  
none on /proc/sys/fs/binfmt_misc type binfmt_misc (rw)  
gvfs-fuse-daemon on /root/.gvfs type fuse.gvfs-fuse-daemon (rw,nosuid,nodev)  
/dev/sr0 on /media/CentOS_6.10_Final type iso9660 (ro,nosuid,nodev,uhelper=udisk  
uid=0,gid=0,iocharset=utf8,mode=0400,dmode=0500)  
/dev/sr0 on /dvd type iso9660 (ro)  
/dev/sdb1 on /data type xfs (rw)  
/dev/sdb2 on /music type ext4 (rw)  
[root@samael ~]# vi /etc/fstab  
[root@samael ~]# df -ah  
[root@samael ~]#  
Filesystem      Size  Used Avail Use% Mounted on  
/dev/sda2        17G   3.5G   12G   23% /  
proc            0     0     0     -   /proc  
sysfs           0     0     0     -   /sys  
devpts          0     0     0     -   /dev/pts  
tmpfs           498M  228K  498M    1% /dev/shm  
/dev/sda1       190M   34M  147M   19% /boot  
none            0     0     0     -   /proc/sys/fs/binfmt_misc  
gvfs-fuse-daemon 0     0     0     -   /root/.gvfs  
/dev/sr0        3.8G   3.8G   0 100% /media/CentOS_6.10_Final  
/dev/sr0        3.8G   3.8G   0 100% /dvd  
/dev/sdb1       3.8G   33M   3.7G    1% /data  
/dev/sdb2       5.4G   12M   5.1G    1% /music  
[root@samael ~]#
```

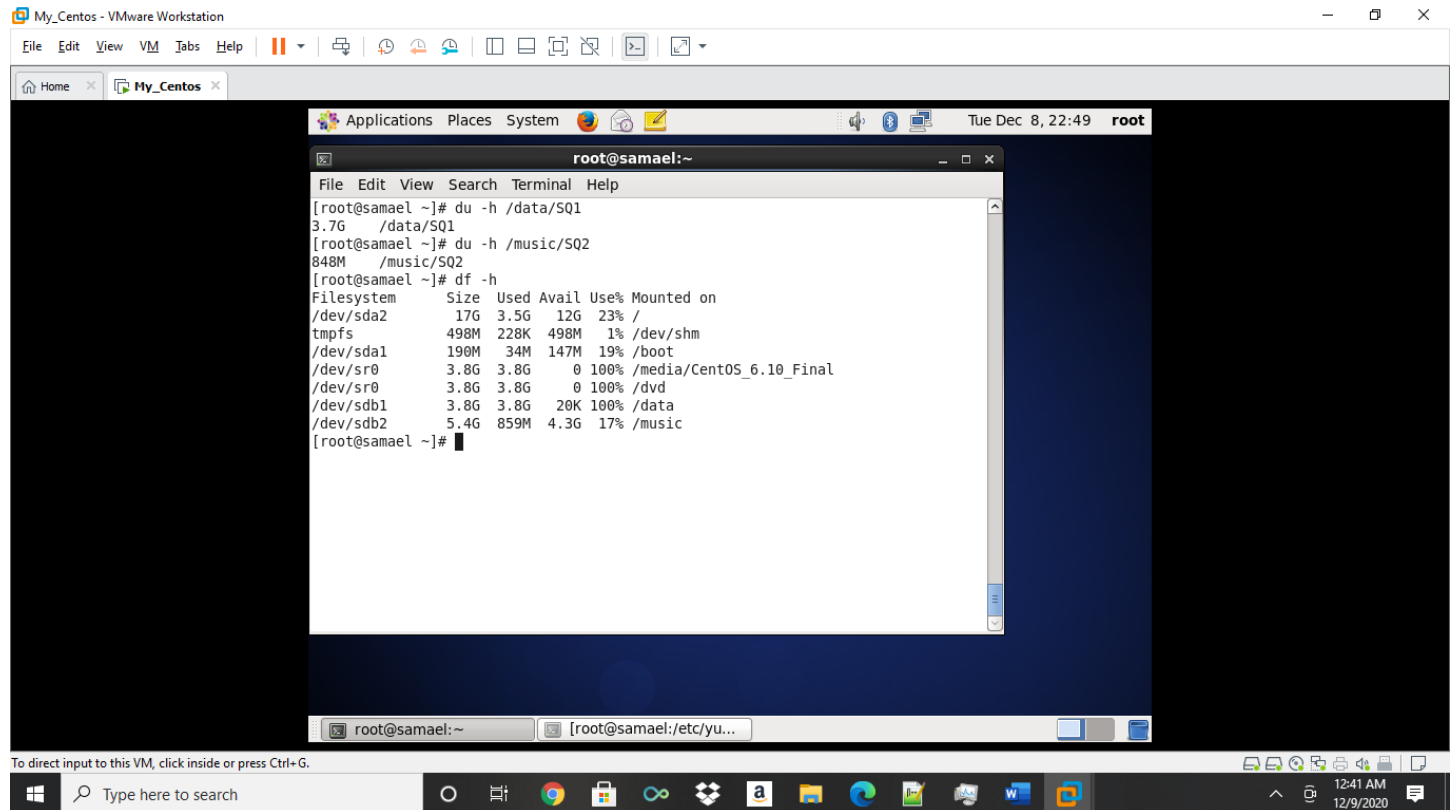
5. Create one file of 1GB in each of the mount point created above.

Use `seq 10000000000 > /data/SQ1` and `seq 10000000000 > /music/SQ2` and then check the size by `du -h /data/SQ1` and `du -h /music/SQ2`.

```
root@samael:~  
File Edit View Search Terminal Help  
[root@samael ~]# du -h /data/SQ1  
3.7G  /data/SQ1  
[root@samael ~]# du -h /music/SQ2  
848M  /music/SQ2  
[root@samael ~]#
```

6. Verify the disk Consumption and disk space free in the mounted partitions.

Type **df -h** to see the free space in the partition



```
My_Centos - VMware Workstation
File Edit View VM Tabs Help
Home My_Centos
Applications Places System
Tue Dec 8, 22:49 root
root@samael:~
File Edit View Search Terminal Help
[root@samael ~]# du -h /data/SQ1
3.7G /data/SQ1
[root@samael ~]# du -h /music/SQ2
848M /music/SQ2
[root@samael ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda2        17G   3.5G   12G   23% /
tmpfs            498M  228K  498M   1% /dev/shm
/dev/sda1       190M    34M  147M  19% /boot
/dev/sr0         3.8G   3.8G    0 100% /media/CentOS_6.10_Final
/dev/sr0         3.8G   3.8G    0 100% /dvd
/dev/sdb1        3.8G   3.8G   20K 100% /data
/dev/sdb2        5.4G  859M   4.3G  17% /music
[root@samael ~]#
```

To direct input to this VM, click inside or press Ctrl+G.

Type here to search

12:41 AM  
12/9/2020