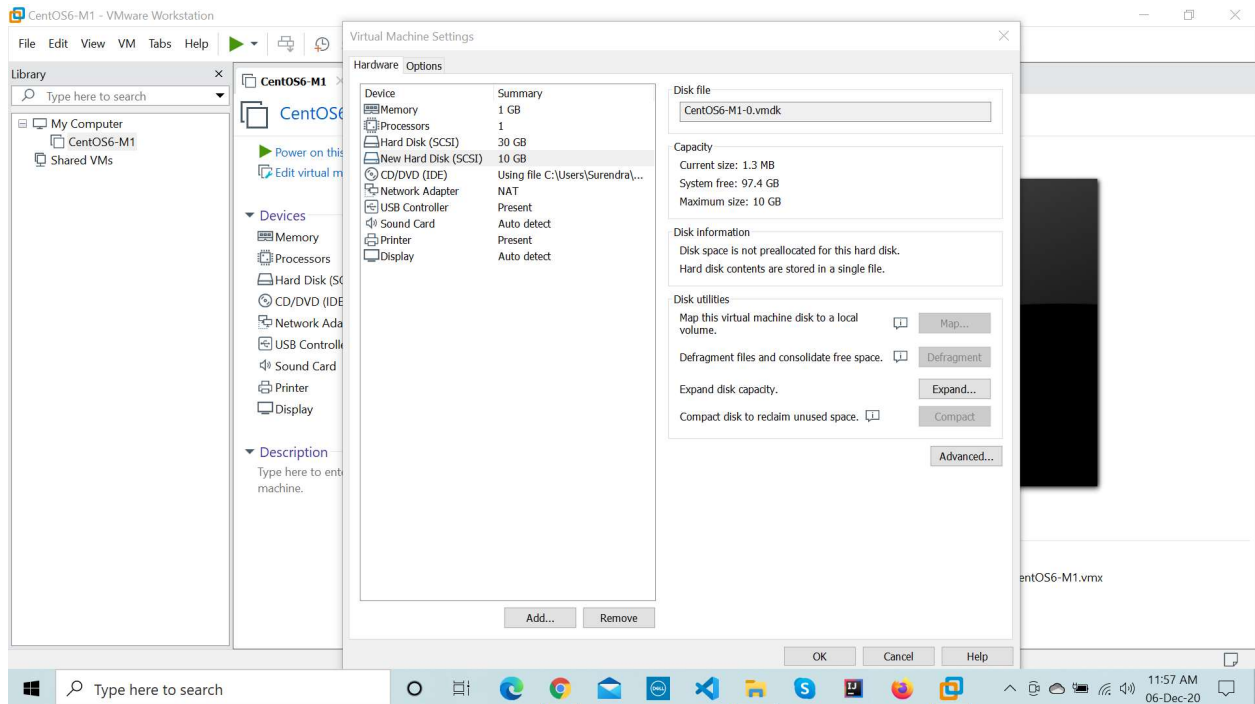


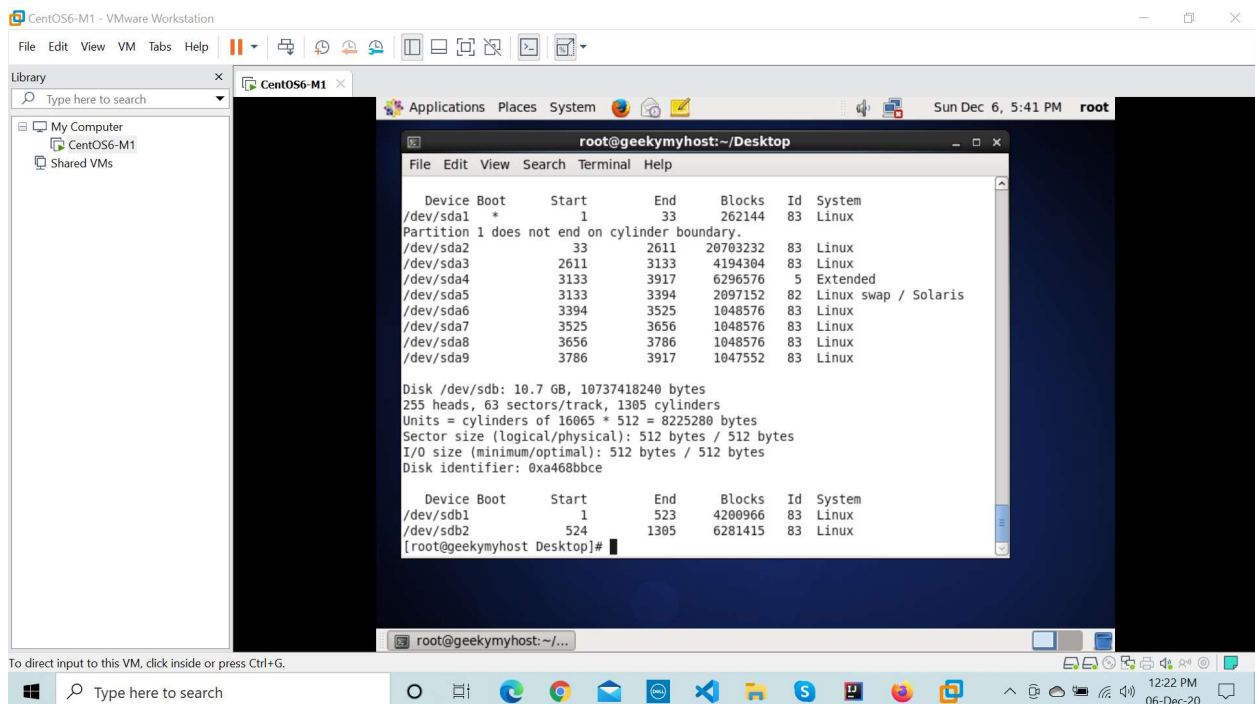
Assignment Day 5 | 4th December 2020

Question 1:

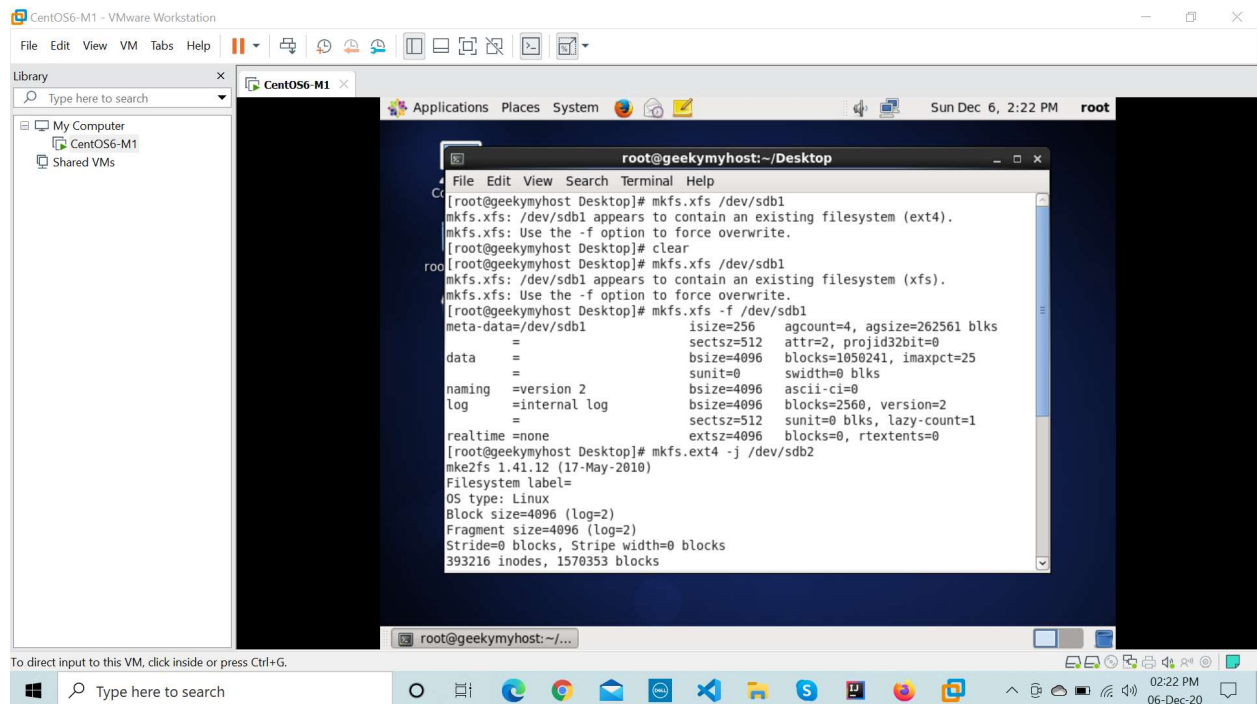
1. Add a 10GB disk to the CentOS.



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

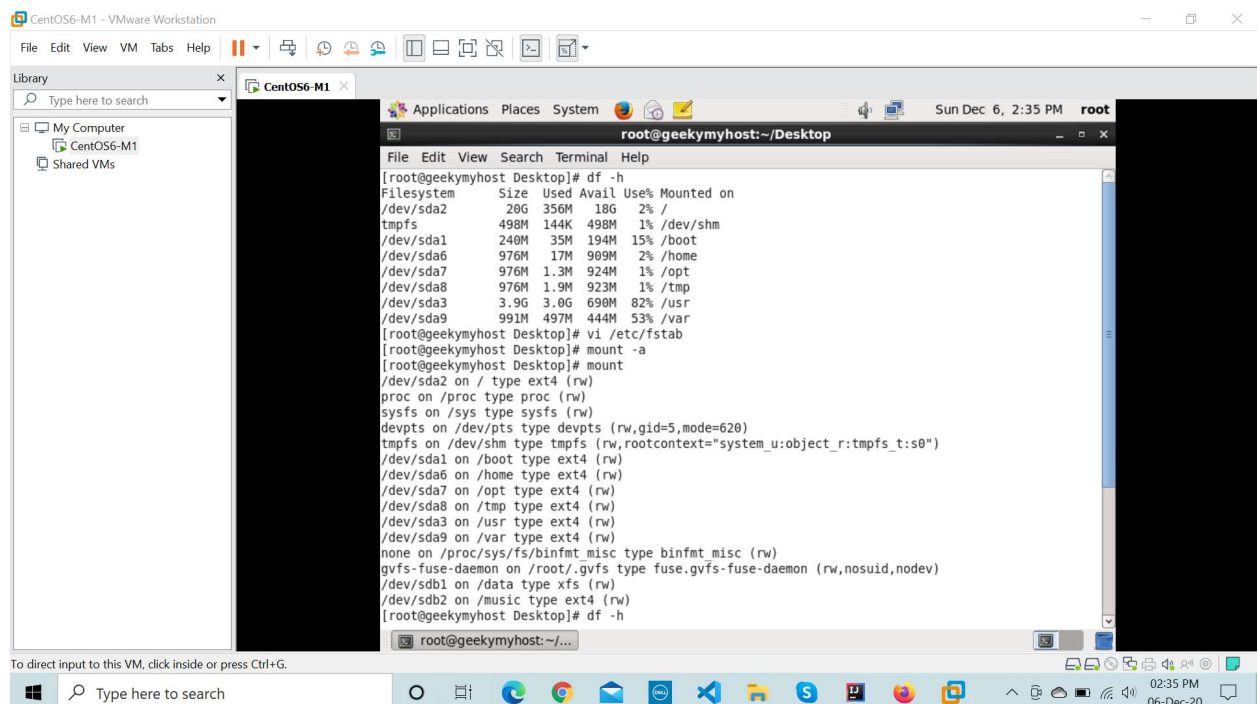


3. Format 4GB with xfs and 6GB with ext4 file system.

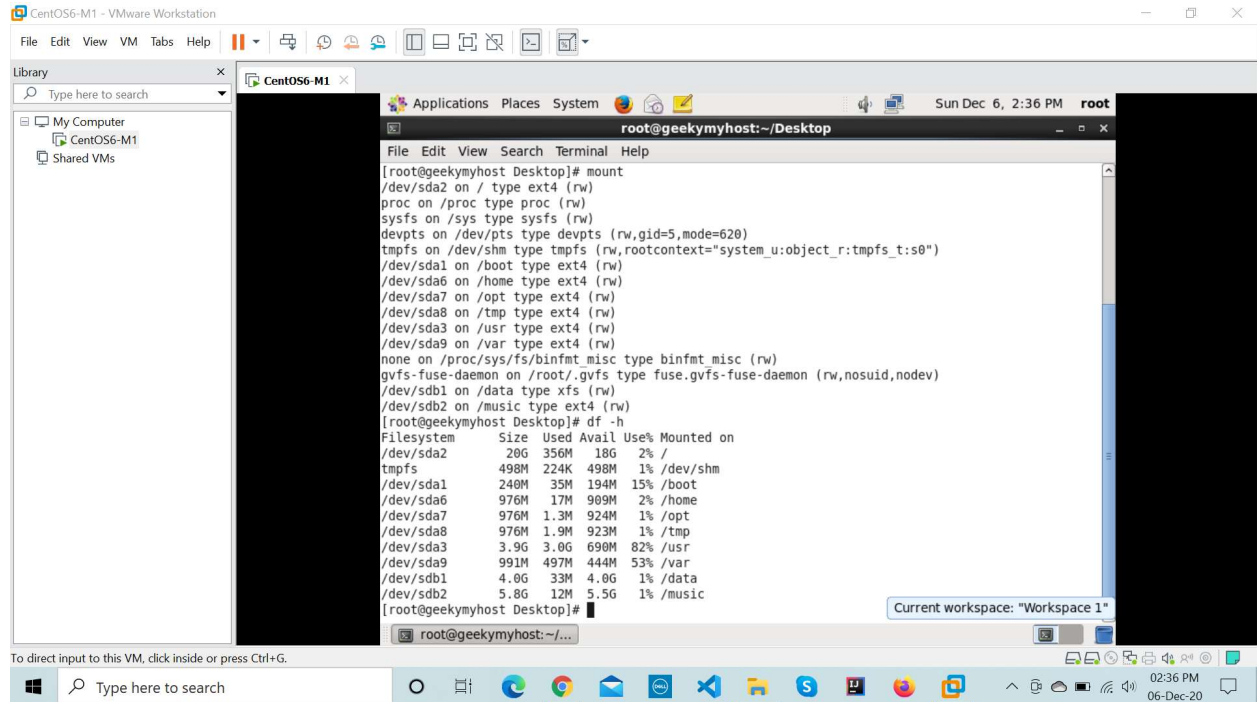


```
root@geekymyhost: ~/Desktop
File Edit View Search Terminal Help
[root@geekymyhost Desktop]# mkfs.xfs /dev/sdb1
mkfs.xfs: /dev/sdb1 appears to contain an existing filesystem (ext4).
mkfs.xfs: Use the -f option to force overwrite.
[root@geekymyhost Desktop]# clear
[root@geekymyhost Desktop]# mkfs.xfs /dev/sdb1
mkfs.xfs: /dev/sdb1 appears to contain an existing filesystem (xfs).
mkfs.xfs: Use the -f option to force overwrite.
[root@geekymyhost Desktop]# mkfs.xfs -f /dev/sdb1
meta-data=/dev/sdb1          isize=256    agcount=4, agsize=262561 blks
                        =      sectsz=512   attr=2,    projid32bit=0
                        =      bsize=4096    blocks=1050241, imaxpct=25
                        =      sunit=0      swidth=0 blks
naming   =version 2          bsize=4096    ascii-ci=0
log      =internal log      bsize=4096    blocks=2560, version=2
                        =      sectsz=512   sunit=0 blks, lazy-count=1
realtime =none              extsz=4096    blocks=0,   rtextents=0
[root@geekymyhost Desktop]# mkfs.ext4 -j /dev/sdb2
mke2fs 1.41.12 (17-May-2010)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
393216 inodes, 1570353 blocks
```

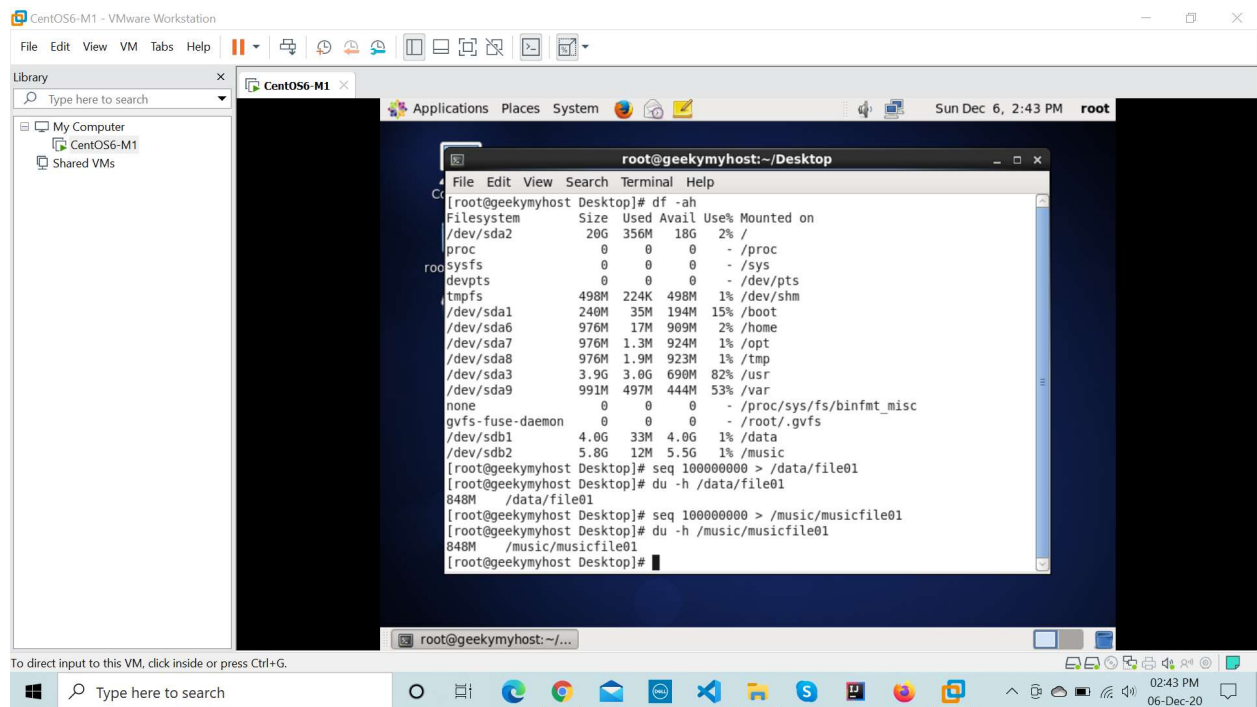
4. Mount 4GB and 6GB in /data and /music directory respectively.



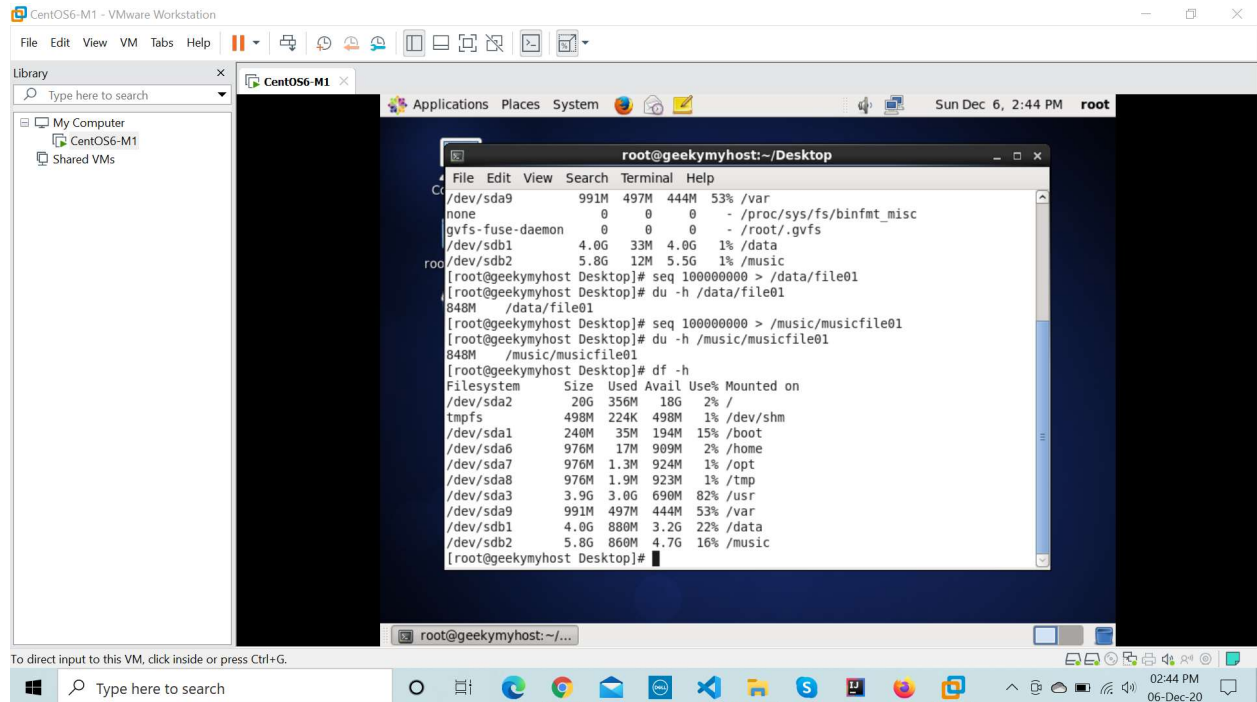
```
root@geekymyhost: ~/Desktop
File Edit View Search Terminal Help
[root@geekymyhost Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda2        20G  356M   18G   2% /
tmpfs           498M  144K  498M   1% /dev/shm
/dev/sda1        240M   35M  194M  15% /boot
/dev/sda6        976M   17M  909M   2% /home
/dev/sda7        976M  1.3M  924M   1% /opt
/dev/sda8        976M  1.9M  923M   1% /tmp
/dev/sda3        3.9G  3.0G  690M  82% /usr
/dev/sda9        991M  497M  444M  53% /var
[root@geekymyhost Desktop]# vi /etc/fstab
[root@geekymyhost Desktop]# mount -a
[root@geekymyhost Desktop]# mount
/dev/sda2 on / type ext4 (rw)
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
devpts on /dev/pts type devpts (rw,gid=5,mode=620)
tmpfs on /dev/shm type tmpfs (rw,rootcontext="system_u:object_r:tmpfs_t:s0")
/dev/sda1 on /boot type ext4 (rw)
/dev/sda6 on /home type ext4 (rw)
/dev/sda7 on /opt type ext4 (rw)
/dev/sda8 on /tmp type ext4 (rw)
/dev/sda3 on /usr type ext4 (rw)
/dev/sda9 on /var 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/sdb1 on /data type xfs (rw)
/dev/sdb2 on /music type ext4 (rw)
[root@geekymyhost Desktop]# df -h
```



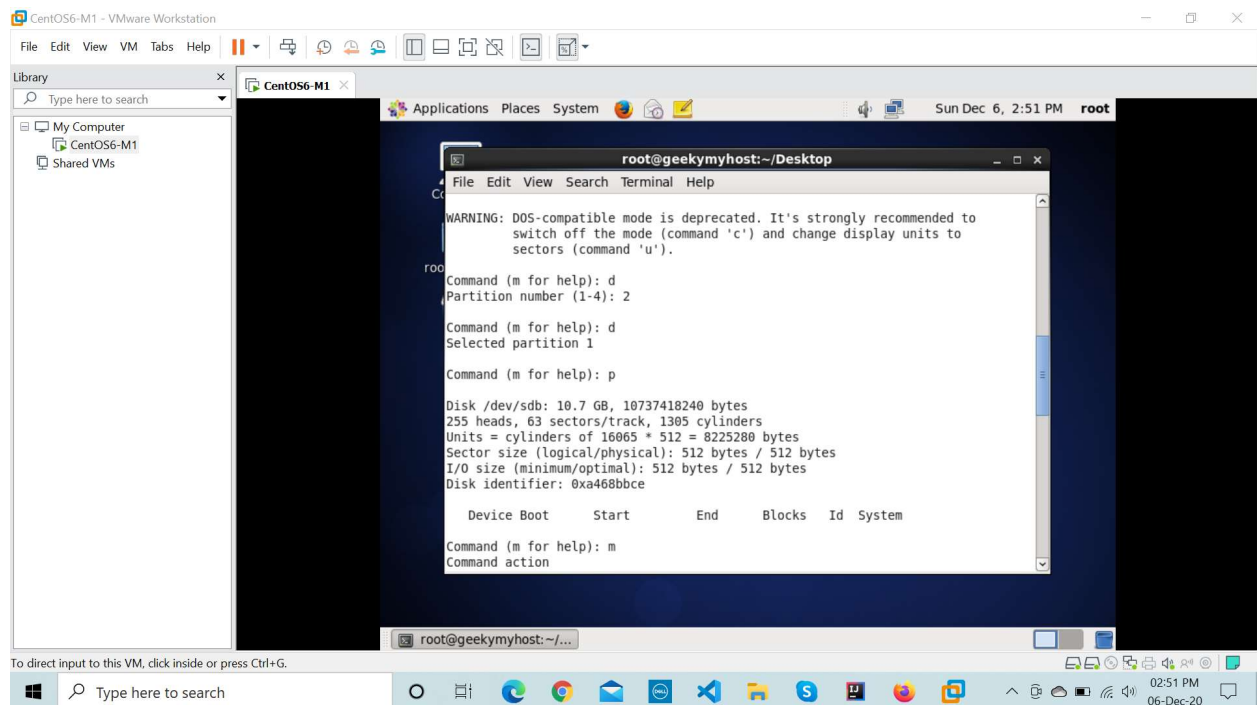
5. Create one file of 1GB in each of the mount point created above.



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



```
root@geekmyhost:~/Desktop
File Edit View Search Terminal Help
/dev/sda9 991M 497M 444M 53% /var
none 0 0 0 - /proc/sys/fs/binfmt_misc
gvfs-fuse-daemon 0 0 0 - /root/.gvfs
/dev/sdb1 4.0G 33M 4.0G 1% /data
/dev/sdb2 5.8G 12M 5.5G 1% /music
[root@geekmyhost Desktop]# seq 100000000 > /data/file01
[root@geekmyhost Desktop]# du -h /data/file01
848M /data/file01
[root@geekmyhost Desktop]# seq 100000000 > /music/musicfile01
[root@geekmyhost Desktop]# du -h /music/musicfile01
848M /music/musicfile01
[root@geekmyhost Desktop]# df -h
Filesystem Size Used Avail Use% Mounted on
/dev/sda2 20G 356M 18G 2% /
tmpfs 498M 224K 498M 1% /dev/shm
/dev/sda1 240M 35M 194M 15% /boot
/dev/sda6 976M 17M 909M 2% /home
/dev/sda7 976M 1.3M 924M 1% /opt
/dev/sda8 976M 1.9M 923M 1% /tmp
/dev/sda3 3.9G 3.0G 690M 82% /usr
/dev/sda9 991M 497M 444M 53% /var
/dev/sdb1 4.0G 880M 3.2G 22% /data
/dev/sdb2 5.8G 860M 4.7G 16% /music
[root@geekmyhost Desktop]#
```



```
root@geekmyhost:~/Desktop
File Edit View Search Terminal Help
WARNING: DOS-compatible mode is deprecated. It's strongly recommended to
switch off the mode (command 'c') and change display units to
sectors (command 'u').
Command (m for help): d
Partition number (1-4): 2
Command (m for help): d
Selected partition 1
Command (m for help): p
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: 0xa468bbce
Device Boot Start End Blocks Id System
Command (m for help): m
Command action
root@geekmyhost:~/Desktop
```

