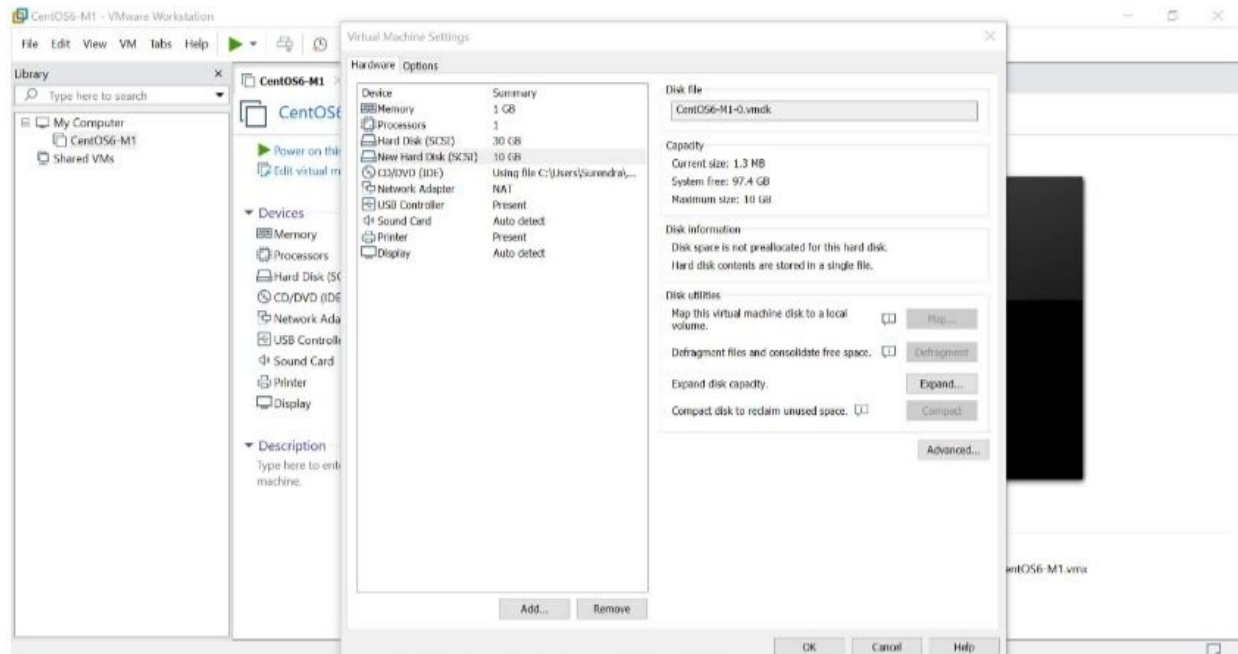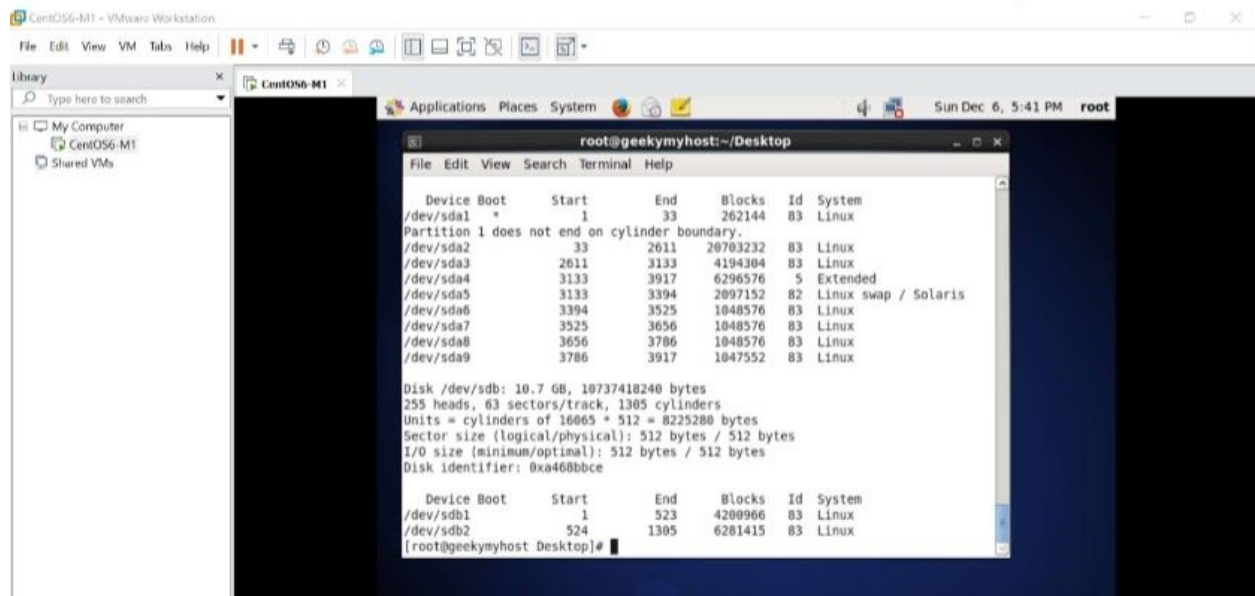# ASSIGNMENT - 5

Question 1:
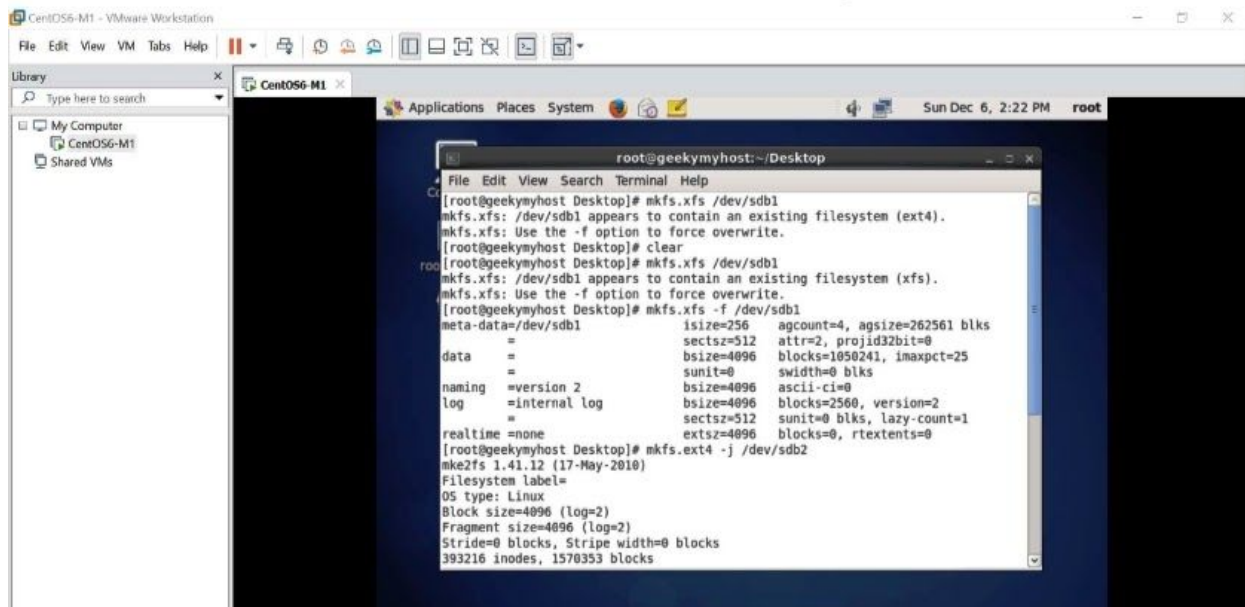
1. Add a 10GB disk to the CentOS.

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

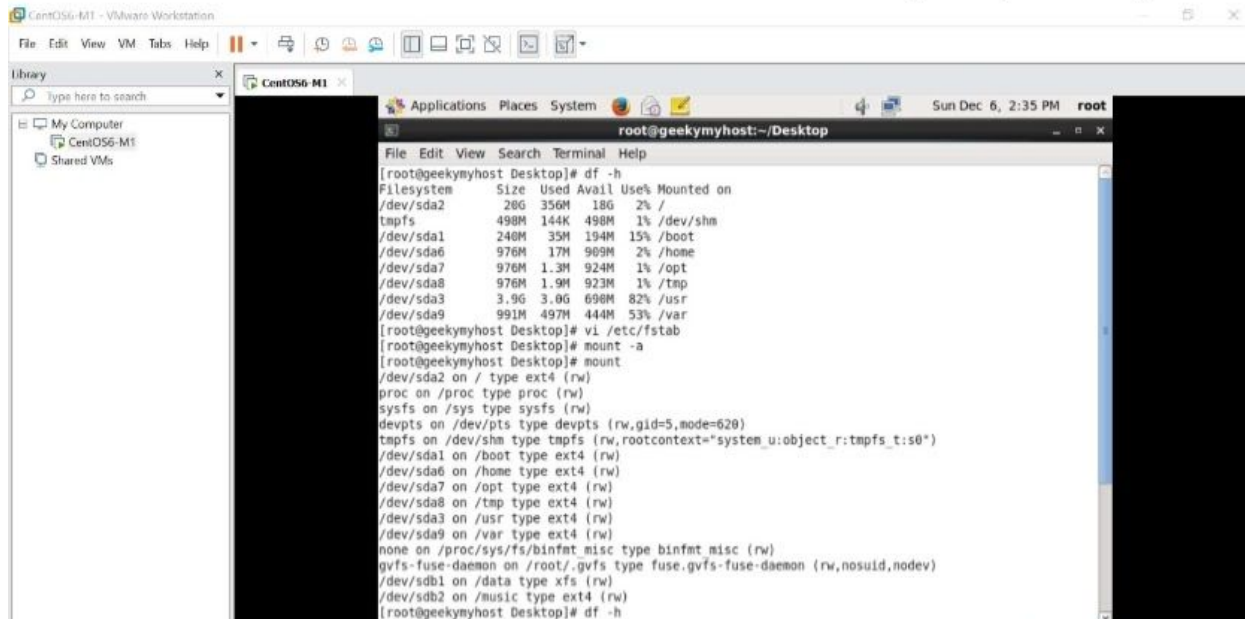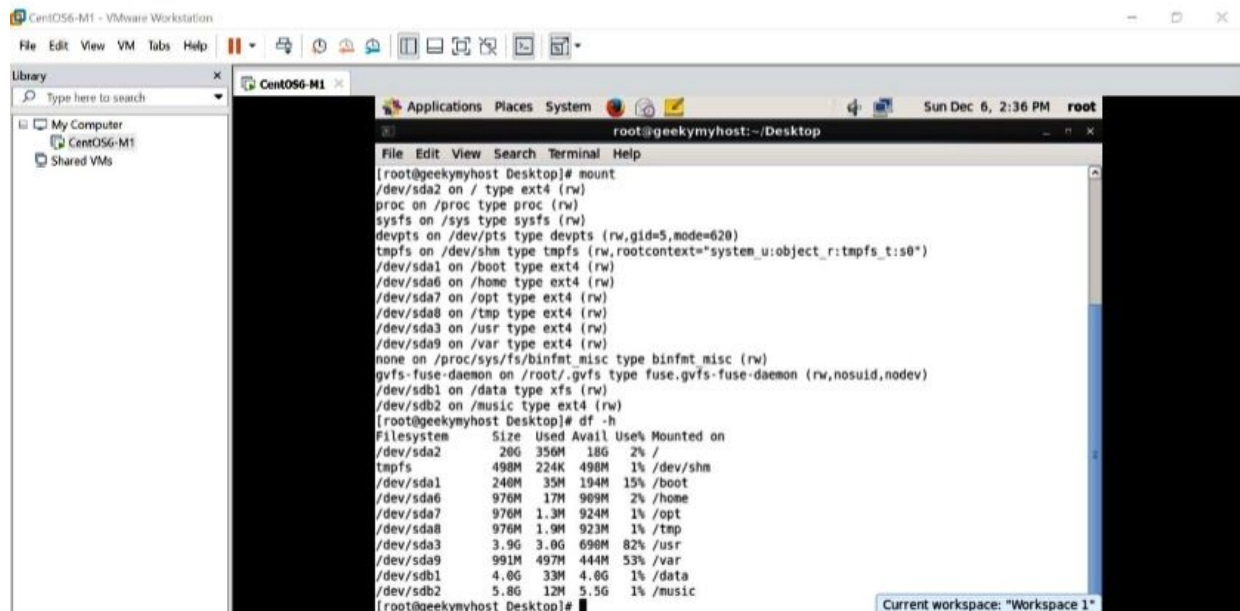# 3. Format 4GB with xfs and 6GB with ext4 file system.


```
[root@geekymyhost Desktop]# 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
data     =                       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
```
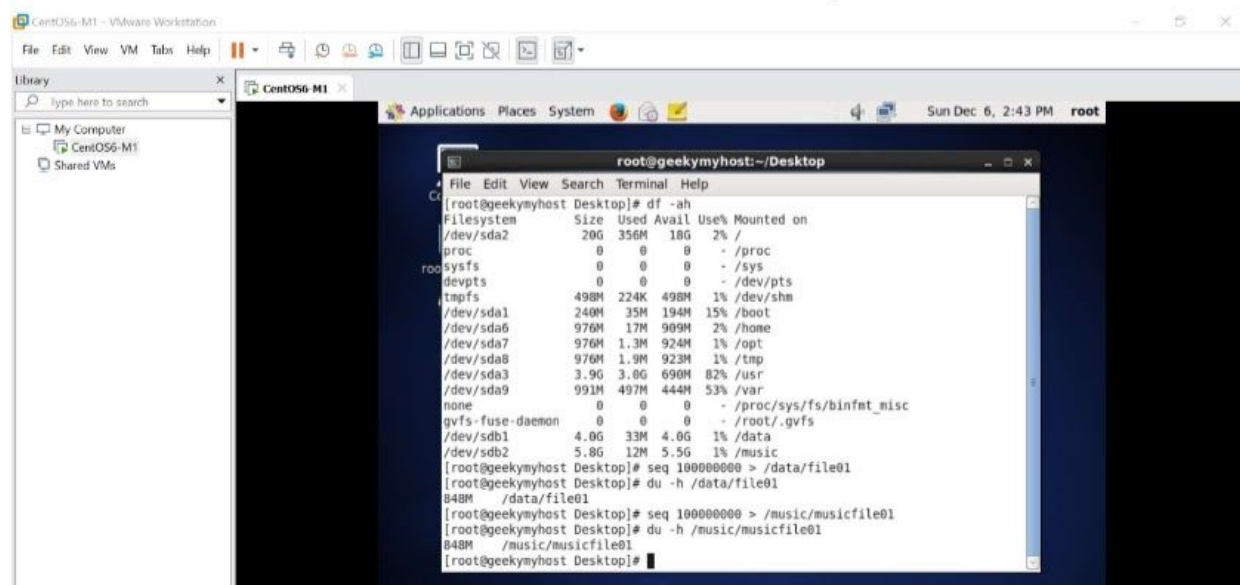
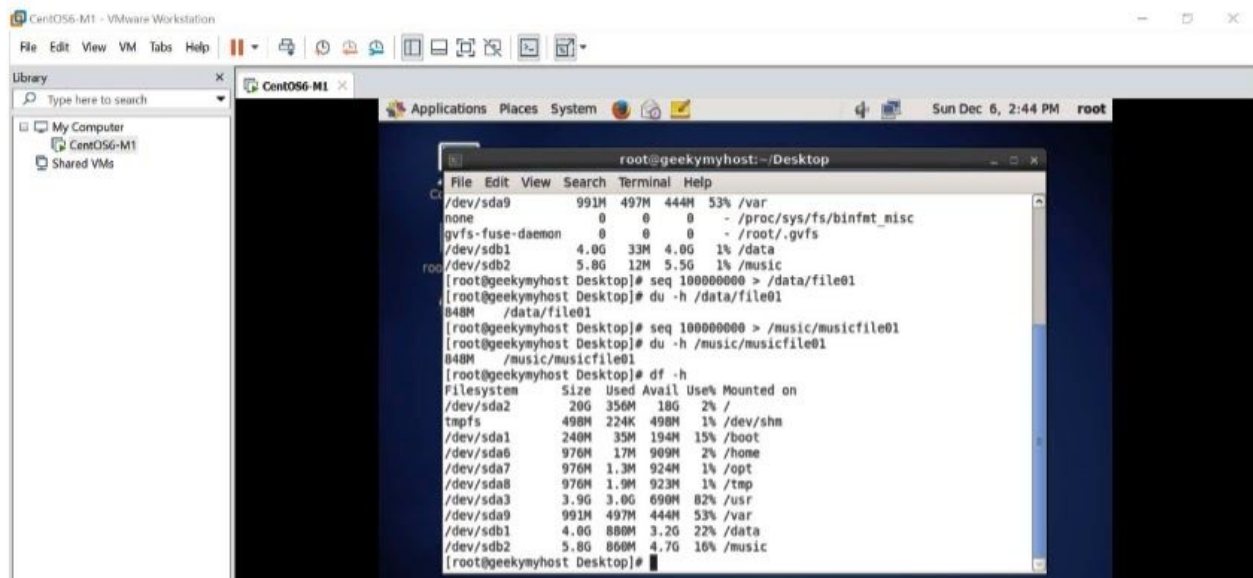# 4. Mount 4GB and 6GB in /data and /music directory respectively.


```
[root@geekymyhost Desktop]# 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  696M  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
```
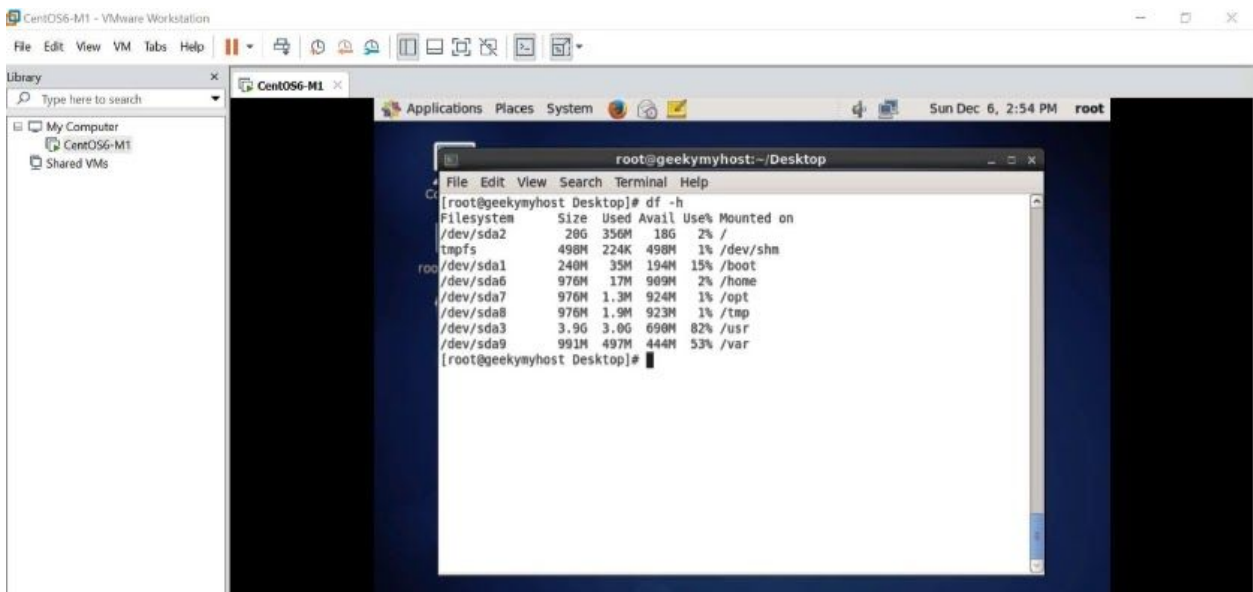
5. Create one file of 1GB in each of the mount point created above.

The following is the terminal output shown in the second screenshot:

```
[root@geekymyhost Desktop]# df -ah
Filesystem          Size  Used Avail Use% Mounted on
/dev/sda2            20G  356M   18G   2% /
proc                   0     0     0    - /proc
sysfs                  0     0     0    - /sys
devpts                 0     0     0    - /dev/pts
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
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@geekymyhost Desktop]# seq 100000000 > /data/file01
[root@geekymyhost Desktop]# du -h /data/file01
848M    /data/file01
[root@geekymyhost Desktop]# seq 100000000 > /music/musicfile01
[root@geekymyhost Desktop]# du -h /music/musicfile01
848M    /music/musicfile01
[root@geekymyhost Desktop]#
```

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


```
/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@geekymyhost Desktop]# seq 100000000 > /data/file01
[root@geekymyhost Desktop]# du -h /data/file01
848M    /data/file01
[root@geekymyhost Desktop]# seq 100000000 > /music/musicfile01
[root@geekymyhost Desktop]# du -h /music/musicfile01
848M    /music/musicfile01
[root@geekymyhost 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@geekymyhost Desktop]#
```



```
[root@geekymyhost 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
[root@geekymyhost Desktop]#
```