

CISC 220 Assignment 2
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CISC 220 Assignment 2 Q3

Screenshot 1

```
root@ubuntu:/home/kevin# df -h
Filesystem                Size      Used Avail Use% Mounted on
udev                     2.0G         0   2.0G   0% /dev
tmpfs                    396M       5.7M   390M   2% /run
/dev/mapper/ubuntu--vg-root 1.7G       1.3G   391M  77% /
tmpfs                    2.0G         0   2.0G   0% /dev/shm
tmpfs                    5.0M         0   5.0M   0% /run/lock
tmpfs                    2.0G         0   2.0G   0% /sys/fs/cgroup
/dev/sda1                 472M       55M   393M  13% /boot
/dev/mapper/ubuntu--vg-home 1.6G       2.6M   1.5G   1% /home
tmpfs                    100K         0   100K   0% /run/lxcfs/controllers
tmpfs                    396M         0   396M   0% /run/user/1000
root@ubuntu:/home/kevin# lsblk
NAME                MAJ:MIN RM   SIZE RO TYPE MOUNTPOINT
sda                  8:0    0     4G  0 disk
├─sda1                8:1    0  487M  0 part /boot
├─sda2                8:2    0     1K  0 part
├─sda5                8:5    0   3.5G  0 part
│   ├─ubuntu--vg-root 252:0    0   1.8G  0 lvm  /
│   ├─ubuntu--vg-swap_1 252:1    0   112M  0 lvm  [SWAP]
│   └─ubuntu--vg-home 252:2    0   1.7G  0 lvm  /home
sdb                  8:16    0     1G  0 disk
sr0                  11:0    1  1024M  0 rom
```

lsblk shows the new hard disk. It is called sdb and is located at /dev/sdb

Screenshot 2

```
Command (m for help): p
Disk /dev/sdb: 1 GiB, 1073741824 bytes, 2097152 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0xbc82fb7a

Device      Boot      Start        End Sectors   Size Id Type
/dev/sdb1           2048    2097151 2095104  1023M  5 Extended
/dev/sdb5           4096    1028095  1024000    500M  83 Linux
/dev/sdb6       1030144    2097151  1067008    521M  83 Linux
```

Screenshot 3

```
root@ubuntu:/home/kevin# df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            2.0G   0    2.0G   0% /dev
tmpfs           396M  5.7M  390M   2% /run
/dev/mapper/ubun--vg-root 1.7G  1.3G  391M  77% /
tmpfs           2.0G   0    2.0G   0% /dev/shm
tmpfs           5.0M   0    5.0M   0% /run/lock
tmpfs           2.0G   0    2.0G   0% /sys/fs/cgroup
/dev/sda1       472M   55M  393M  13% /boot
/dev/mapper/ubun--vg-home 1.6G  2.6M  1.5G   1% /home
tmpfs           100K   0   100K   0% /run/lxcfs/controllers
tmpfs           396M   0   396M   0% /run/user/1000

root@ubuntu:/home/kevin# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda          8:0    0    4G  0 disk
├─sda1       8:1    0 487M  0 part /boot
├─sda2       8:2    0    1K  0 part
└─sda5       8:5    0  3.5G  0 part
   └─ubuntu--vg-root 252:0  0  1.8G  0 lvm /
      └─ubuntu--vg-swap_1 252:1  0  112M  0 lvm [SWAP]
         └─ubuntu--vg-home 252:2  0  1.7G  0 lvm /home
sdb          8:16   0    1G  0 disk
├─sdb1       8:17   0    1K  0 part
├─sdb5       8:21   0  500M  0 part
└─sdb6       8:22   0  521M  0 part
sr0         11:0    1 1024M  0 rom
```

`lsblk` shows the new disk again called `sdb`. The notable difference is now you can see the partitions made on `sdb`.

Screenshot 4

```
root@ubuntu:/home/kevin# df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            2.0G   0    2.0G   0% /dev
tmpfs           396M  5.7M  390M   2% /run
/dev/mapper/ubun--vg-root 1.7G  1.3G  391M  77% /
tmpfs           2.0G   0    2.0G   0% /dev/shm
tmpfs           5.0M   0    5.0M   0% /run/lock
tmpfs           2.0G   0    2.0G   0% /sys/fs/cgroup
/dev/sda1       472M   55M  393M  13% /boot
/dev/mapper/ubun--vg-home 1.6G  2.6M  1.5G   1% /home
tmpfs           100K   0   100K   0% /run/lxcfs/controllers
tmpfs           396M   0   396M   0% /run/user/1000
/dev/sdb5       477M  2.3M  449M   1% /home/kevin/newDisk1
/dev/sdb6       497M  428K  471M   1% /home/kevin/newDisk2

root@ubuntu:/home/kevin# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda          8:0    0    4G  0 disk
├─sda1       8:1    0 487M  0 part /boot
├─sda2       8:2    0    1K  0 part
└─sda5       8:5    0  3.5G  0 part
   └─ubuntu--vg-root 252:0  0  1.8G  0 lvm /
      └─ubuntu--vg-swap_1 252:1  0  112M  0 lvm [SWAP]
         └─ubuntu--vg-home 252:2  0  1.7G  0 lvm /home
sdb          8:16   0    1G  0 disk
├─sdb1       8:17   0    1K  0 part
├─sdb5       8:21   0  500M  0 part /home/kevin/newDisk1
└─sdb6       8:22   0  521M  0 part /home/kevin/newDisk2
sr0         11:0    1 1024M  0 rom
```

Now you can see the two logical partitions `/dev/sdb5` and `/dev/sdb6` in `df -h` because they are mounted, as well as in `lsblk` (which also shows their mount point). Again, the hard disk itself is shown in `lsblk` as `sdb`

Screenshot 5

```
root@ubuntu:/home/kevin# cat /etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options> <dump> <pass>
/dev/mapper/ubuntu--vg-root / ext4 errors=remount-ro 0 1
# /boot was on /dev/sda1 during installation
UUID=830099a2-c2de-4f8b-9fc0-f7529b6021f4 /boot ext2 defaults 0 2
/dev/mapper/ubuntu--vg-home /home ext4 defaults 0 2
/dev/mapper/ubuntu--vg-swap_1 none swap sw 0 0
/dev/sdb5 /home/newDisk1 ext3 defaults 0 0
/dev/sdb6 /home/newDisk2 ext3 defaults 0 0
```