



```
#fdisk /dev/vdb
```

(command m-for help) n -to create new partition

to change the partition type to lvm

(command m-for help) t ----to change type to lvm (p-primary , e-extended)

code 0x8e

Before we create logical volume physical storage should be formatted as physical volumes

```
>pvcreate /dev/stc1
```

```
>pvcreate /dev/std1
```

Then we need to configure these devices in single volume group. While creating volume group we need to specify some name i.e volume123

```
>vgcreate vgrp123 /dev/stc1 /dev/std1
```

Then we create logical volume on which file system is stored.

-n -----Is for name of the volume

-L -----size of the volume

```
>lvcreate -n mylv1 -L 1G vgrp123
```

Then create file system for the created volume

By default this mount system will be checked after every 23 mounts or 180 days whichever comes first. If you wants to tune it then use tune2fs -c or -l for override

```
>mkfs.ext3 /dev/vgrp123/mylv1
```

Then create a folder and mount it on the logical volume

```
>mkdir lvmdata
```

```
>mount /dev/vgrp123/mylv1 /lvmdata/
```

Use command df -h to see all disk fragments and disk free space

```
>df -h
```

o/p

```
[root@demo ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda2        48G   6.4G   39G   15% /
/dev/sda1        99M    12M   83M   13% /boot
tmpfs            2.0G     0   2.0G    0% /dev/shm
/dev/sda3       950M    18M  885M    2% /data
/dev/mapper/exampleVG-exampleLV
                1008M    34M  924M    4% /lvmdata
[root@demo ~]#
```

This will show you following entries

/dev/mapper/vgrp123/mylv1

File system	Size	used	Avail	Use%	Mount on
/dev/mapper/vgrp123-my mylv1	1008M	34M	924M	4%	/lvmdata

To resize or extend logical volume space allocated use following command

```
>lvextend -L +500 M /dev/vgrp123/mylv1
```

If you give command

```
>df -h ----- changes will not be reflected
```

```
>resize2fs /dev/vgrp123/mylv1 ----- to resize ext4 fs
```

```
>df -h ----- changes in size will be seen
```

To delete the group

Pvremove

Vgremove

Lvremove

To display

Pvdisplay

To reduce volume groups

vgreduce

To extend volume group

Vgextend vg1 /dev/vdb1 -----volume group will be extended to pv /dev/vdb1