LVM is used to manage volume & disk on the disk server , LVM volume manager allows disks to be combined together

Examples of LVM :

Like partition of disk in windows C , D drive similarly we can do the same in the linux

Single disk can be divided into different partitions
Multiple disks combined & group them into one , then change it into different partitions

Advantage : In case of disk is running out of space , you can add new disk without breaking partitions of your
File system

New space can be created for new project
In case of low disk space , increase the space
In case of extra space allocated to a partition , capacity can be reallocated

Task : we need to deploy 2 new applications app1 & app2 on our server & need a separate partition for each applications

Steps

Install a new HDD
Make a partition to use it
Designate physical volume
Manage volume group
Manage logical group
Apply a filesystem
Set a mount point

Commands :

**** Fdisk -l**

Use of fdisk

Frisk /dev/sdb

Choose n to create new
Choose p to create a primary partition
Change the type of new partition [press t]
Select linux lvm

W for write

**** physical volume**

pvcreate /dev/sdb1
Pvdisplay

**** volume group**

Vgcreate vgapps /dev/sdb1

vgdisplay vgapps

**** logical volume**

*** Lvcreate -L size[1000M] -n lvname vgname**
Lvdisplay /dev/vgapps/lv-apps1

**** apply a filesystem & set the mount point**

mkfs.ex4 path[/dev/vgapps/lv-app1]

**** create 2 dir with /**
/app1
/app2

**** mount /dev/vgapp/lv-app1 /app1**
Mount /dev/vgapp/lv-app2 /app2

Df -Th

**** cat /etc/mtab**

Vim /etc/fstab

Edit :

**** mount -av**