## Name : Darshak kandoriya

## Module :3- Linux server - Configure local storage Assignment

# 1.Learn about different filesystem types (e.g., ext4, NTFS).

Ans: ext4: Linux, journaling, large files, general-purpose.

NTFS: Windows, journaling, encryption, large files.

# 2.Manage disk partitions and filesystems using tools like fdisk, mkfs, and mount.

# Ans: Done

# 3.create a 2048MB partition and verify if the partition has been created.

# Ans: Done

# 4.Why LVM is required?

# Ans: Logical Volume Management (LVM) is a storage virtualization tool that helps system administrators manage disk storage space. It's useful because it provides more flexibility than using physical storage directly. Some benefits of LVM include

# 5.How can you find out how much memory Linux is using?

# Ans: top: Real-time memory and process info.

# htop: Interactive memory usage (requires installation).

# vmstat: Virtual memory statistics.

# cat /proc/meminfo: Detailed memory info.

# 6.What is a typical size for a swap partition under a Linux system?

Ans: Generally, 1 to 2 times the size of RAM. For example, if you have 8 GB of RAM, a 8 GB to 16 GB swap partition is common.

# 7.What is the maximum file size on the ext4 file system?

# Ans: 16 TiB (Tebibytes)

# 8.What is the maximum file size on the xfs file system

Ans: With a 4KB block size, the maximum file size is approximately 8 exabytes (EB).

With a 64KB block size, the maximum file size can be up to 16 exabytes.