Module 3(linux server) – Configure local storage Assignment

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

Ans-> There are some different filesystem types are as follow:-

1. ext4 (Fourth Extended Filesystem).
2. NTFS (New Technology File System).
3. FAT32 (File Allocation Table 32-bit).
4. exFAT (Extended File Allocation Table).
5. HFS+ (Hierarchical File System Plus).
6. APFS (Apple File System).
7. XFS
8. Btrfs (B-Tree Filesystem).
9. ZFS (Zettabyte File System).
10. Manage disk partitions and filesystems using tools like fdisk, mkfs, and mount.

Ans-> There are some steps of disk partitions and filesystems using tools like fdisk, mkfs, and mount are as follow:-

1. View Existing Disk Partitions. (fdisk -l).
2. Partition a Disk with fdisk(fdisk /dev/sdb).
3. Format a Partition with mkfs.ext:-(mkfs.ext4 /dev/sdb1).
4. Mount the Filesystem.
5. create a 2048MB partition and verify if the partition has been created.

Ans-> There are some steps to create a 2048MB partition are as follow:-

1. Identify the Disk.
2. Launch fdisk.
3. Create a New Partition.
4. Verify the Partition.
5. Format the Partition.
6. Mount and Verify.
7. Why LVM is required?

Ans-> Logical Volume Management (LVM) is not strictly required but is highly advantageous in many scenarios. It provides flexibility, scalability, and manageability for disk storage, which traditional partitioning systems cannot offer. There are some point to required for LVM are as follow:-

1. Dynamic Resizing of Storage.
2. Simplified Management of Multiple Disks.
3. Snapshots for Backup.
4. Storage Flexibility.
5. RAID-Like Features.
6. Easy Disk Replacement and Migration.
7. Useful in Virtualized Environments.
8. Overcoming Limitations of Traditional Partitioning.
9. How can you find out how much memory Linux is using?

Ans-> There are as some steps to memory linux is using are as follow:-

1. Using the free Command.
2. Using the /proc/meminfo File.
3. Using the top Command.
4. Using the htop Command.
5. Using the vmstat Command.
6. Using ps Command for Process-Level Memory.
7. Using GUI Tools.
8. Using smem for Detailed Analysis.
9. What is a typical size for a swap partition under a Linux system?

Ans-> The typical size of a swap partition in a Linux system depends on several factors, including the amount of RAM, the system's workload, and whether the system will use hibernation.