**Linux module – 4**

**Assignment**

Que: Manage users and group with commands like useradd, groupadd, userdel, and passwd.

Ans:

1. Useradd: The useradd command is used to create a new user on the system.

Example: sudo useradd john

1. Passwd: The passwd command allows you to set or change the password for a user.

Example: sudo passwd john

1. Userdel: The userdel command is used to delete a user from the system.  
    Example: sudo userdel john
2. Groupadd: The groupadd command is used to create a new group on the system.

Que: Explain different file system types in linux.

Ans:

* ext4(Fourth Extended File System): ext4 is the most widely used file systemin linux. It is the successor to ext3 and offers improvement in performance, scalability, and reliability.
* ext3(Third Extended File System): ext3 was the default file system in many linux distribution before ext4. It was an improvement over ext2 with the addition of journaling.
* F2FS(Flash-Friendly File System): F2FS is a file system specially designed for NAND-based flash memory storage devices, such as SSDs and eMMC storage.
* NTFS(New Technology File System): NTFS is a file system used by windows operating system. Linux can read and write to NTFS partition using the ntfs-3g driver.
* FAT32(File Allocation Table 32): FAT32 is an older file system primarily used for flash drives, SD cards, and external hard drives. It is compatible across a wide range of operating systes.

Que: Explain file permission groups in linux.

Ans:

1. Owner(User): The user who owns the file or directory.
2. Group: A set of users who share access to a file or directory.
3. Other(Everyone else): Any user on the system who is not the owner or part of the group.

File permission types:

1. Read(r): allows the user to open and read the content of the file.
2. Write(w): allows the user to modify the content of the file.
3. Execute(x): allows the user to execute the file. For directories, it grants permission to enter or search the directory.

Que: How do you switch from one desktop environment to another, such as switching from KDE to Gnome?

Ans:

* Go to the login screen: Boot the computer or server, or if you’re already logged in, right-click on an empty space on the desktop, select log out, and then click end current session.
* Click the gear button: Enter your username, and then click the gear button next to the sign in button.
* Select the desired desktop environment: From the drop-down menu, choose the desktop environment you want to use.
* Log in: Log in as usual.

Que: What are the kinds of permission under linux.

Ans: There are three types of file permission in linux:

* Read: Allows a user to read the contents of a file.
* Write: Allows a user to write or modify a file or directory.
* Execute: Allows a user to execute a file or view the content of a directory.

Que: What are the different modes when using vi editor?

Ans: The vi editor has two modes: command and insert. When you first open a file with vi, you are in command mode. Command mode means you can use keyboard keys to navigate, delete, copy, paste, and do a number of other tasks-except entering text. To enter insert mode, press i.