

## Module: 1 -Linux Server - Linux Basics And Networking

### 1 .What is the minimum number of partitions you need to install Linux?

**Ans :-** The minimum required is one root (/) partition. However, it is recommended to have at least two partitions: root (/) and swap.

### 2. Explain About Chmod Command

**Ans:-** chmod changes the file or directory permissions in Linux.

### 3. How to check Linux memory utilization

**Ans:**

Cmd :- free -h

Cmd:- cat /proc/meminfo

### 4. · Use grep to search for specific patterns in files.

**Ans:-** grep "pattern" filename.txt

### 5. Get Connecting on a Linux server by ssh

**Ans:-** ssh user@hostname\_or\_ip

### 6. Create 5 files in the /tmp directory, and then use tar and gzip to bundle and compress the files.

**Ans:-**

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cd /tmp

touch file1 file2 file3 file4 file5

tar -czvf myfiles.tar.gz file1 file2 file3 file4 file5

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### 7. Describe the root account

- **Ans:** The **root** account is the **superuser** in Linux with **unrestricted access** to all commands, files, and the system.

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### 8. What is shell?

- **Ans:** A shell is a command-line interface that allows users to interact with the OS

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## 9. What is Linux?

- **Ans:** Linux is a **free, open-source, UNIX-like** operating system kernel. Most Linux distributions include the kernel plus software and package management.

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## 10. What is Bash?

- **Ans:** Bash (**Bourne Again SHell**) is a popular **command-line shell** and scripting language used in Linux.

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## 11. You have a new empty hard drive that you will use for Linux. What is the first step you use?

- **Ans:** Partition the drive using a tool like:

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`fdisk /dev/sdX`

(replace sdX with the actual device name)

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## 12. Write the Linux command to show the current working directory.

**Ans:**

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`pwd`

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## 13. Write the Linux command to get help with various options.

**Ans:**

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`command --help`

# or

`man command`

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**14. Write the Linux command to display what all users are currently doing.**

**Ans:**

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w

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**15. Write the Linux command to get information about the operating system.**

**Ans:**

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uname -a

# or

cat /etc/os-release

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**16. Write the Linux command to create a hard link of a file.**

**Ans:**

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ln original.txt hardlink.txt

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**17. Write the Linux command to create a soft link of a file as well as Directory.**

**Ans:**

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ln -s original.txt softlink.txt

ln -s /path/to/dir link\_to\_dir

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**18. Write the Linux command to search for specific pattern in a file.aa**

**Ans:**

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grep "pattern" filename.txt

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**19. Write the Linux command to show the use of basic regular expressions using grep command.**

**Ans:**

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```
grep "^start" filename.txt    # lines that start with "start"
```

```
grep "end$" filename.txt     # lines that end with "end"
```

```
grep "[0-9]" filename.txt
```