

Module: 1

Linux server - Understand and use essential tools

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

Ans - The minimum number of partitions needed to install Linux is **one** (the root (/) partition).

2. Explain About Chmod Command

Ans - The chmod command in Linux is used to **change the file or directory permissions** (read, write, execute) for the owner, group, and others.

3. How to check Linux memory utilization

Ans - You can check Linux memory utilization using the(free -h)or(top)command.

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

Ans - The grep command is used to **search for specific text patterns** within files in Linux.

5. · Get Connecting on a linux server by ssh

Ans - Use the(ssh username@hostname)command to connect to a Linux server via SSH.

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

Ans - cd /tmp

touch file1 file2 file3 file4 file5

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

7. ·Describe the root account

Ans - The root account in Linux is the **superuser** with full administrative privileges and unrestricted access to all commands and files.

8. What is shell?

Ans-A shell is a **command-line interface** that allows users to interact with the Linux operating system.

9. What is Linux?

Ans- Linux is a **free and open-source operating system** based on UNIX, widely used for servers, desktops, and embedded systems.

10. What is Bash?

Ans - Bash (Bourne Again SHell) is the **default command-line interpreter** for most Linux systems, used to execute commands and scripts.

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

Ans -The first step is to **create partitions** on the new hard drive using a tool like(fdisk)or(parted).

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

Ans- pwd

13. write the Linux command to get help with various options.

Ans- `man command_name`

14. Write the linux command! to display what all users are currently doing.

Ans- `w`

15. write the Linux command to get information about the operating system.

Ans - `uname -a`

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

Ans - `ln source_file hard_link_name`

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

Ans- `ln -s source_file_or_directory link_name`

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

Ans- `grep "pattern" filename`

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

Ans- `grep "^start.*end$" filename`