 Linux Server

Understand and use essential tools

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

A:

* Root partition ‘/ ’(Must)
* Swap partition (Recommended)
* EFI partition ‘ESP’ (Required if using UEFI)
* Boot Partition ‘/boot’ (Optional)
* Home partition ‘/home’ (Optional)

2. Explain About chmod Command.

A:

* Purpose: Modify file and directory permissions.
* Syntax: chmod [options] file
* Symbolic Mode: chmod u+x file (add execute for owner)
* Octal Mode: chmod 755 file (set permissions to rwxr-xr-x)

3. How to check Linux memory utilization

A: There many options to check memory utilization in linux such as

* + free -h
  + top
  + htop
  + vmstat -s

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

A: root@ubuntu# grep 'apple' fruits.txt

apple

apple pie

5. Get Connecting on a linux server by ssh

A: ssh [root@192.168.1.100](mailto:root@192.168.1.100)

Then enter password

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

A:

cd /tmp

# Create 5 text files

echo "This is file 1" > file1.txt

echo "This is file 2" > file2.txt

echo "This is file 3" > file3.txt

echo "This is file 4" > file4.txt

echo "This is file 5" > file5.txt

#Bundle files

tar -cvf files\_archive.tar file1.txt file2.txt file3.txt file4.txt file5.txt

#Zip files

gzip files\_archive.tar

#Verify files

ls -l /tmp/files\_archive.tar.gz

7. Describe the root account

A: The root account is the superuser in Unix-like systems with full system access. It has UID `0` and can perform any administrative task. For security, use `sudo` rather than logging in directly as root.

8. What is shell?A: A shell is a command-line interface that allows users to interact with the operating system by typing and executing commands. Examples include Bash and Zsh.

9. What is Linux?A: Linux is an open-source operating system kernel used in various distributions known for its stability and flexibility.

10. What is Bash?

A: Bash is a popular command-line shell and scripting language for Unix-like systems. It allows users to interact with the operating system by executing commands and writing scripts.

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

A: First step is to create partitions

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

A: root@ubuntu# pwd

/home/user/Desktop

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

A: command - - help

root@ubuntu# ls - -help

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

A: root@ubuntu# who

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

A: root@ubuntu# uname -a

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

A: root@ubuntu# file1.txt link\_to\_file1.txt

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

A: root@ubuntu# ln -s file1.txt link\_to\_file1.txt

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

A: grep 'error' log.txt

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

A: grep 'error' log.txt

grep 'h.t' file.txt

grep '^start' filename

grep 'end$' filename

grep 'word1\|word2' filename

grep 'pattern\{n\}' filename