Assignment on Linux Command

1. ls:

Lists directory contents.

Example: ls /home lists files and directories in /home.

2. cd:

Changes the current directory.

Example: cd /var/log changes to the /var/log directory.

3. pwd:

Prints the current working directory.

Example: pwd outputs the current directory path.

4. mkdir:

Creates a new directory.

Example: mkdir new_folder creates a directory named new_folder.

5. rmdir:

Removes an empty directory.

Example: rmdir old_folder removes the directory old_folder.

6. rm:

Removes files or directories.

Example: rm file.txt deletes file.txt; rm -r dir deletes directory dir and its contents.

7. cp:

Copies files or directories.

Example: cp source.txt destination.txt copies source.txt to destination.txt.

8. mv:

Moves or renames files or directories.

Example: mv oldname.txt newname.txt renames oldname.txt to newname.txt.

9. touch:

Creates an empty file or updates the timestamp of an existing

file.Example: touch newfile.txt creates an empty file newfile.txt.

10. cat:

Concatenates and displays file content.

Example: cat file.txt displays the contents of file.txt.

11. less:

Views file content one screen at a time.

Example: less largefile.txt allows scrolling through largefile.txt.

12. head:

Displays the first few lines of a file.

Example: head -n 10 file.txt shows the first 10 lines of file.txt.

13. tail:

Displays the last few lines of a file.

Example: tail -n 10 file.txt shows the last 10 lines of file.txt.

14. grep:

Searches for text within files.

Example: grep "pattern" file.txt searches for "pattern" in file.txt.

15. find:

Searches for files and directories.

Example: find / -name filename searches for filename starting from the rootdirectory.

16. chmod:

Changes file permissions.

Example: chmod 755 script.sh sets script.sh permissions to rwxr-xr-x.

17 chown:

Changes file owner and group.

Example: chown user:group file.txt changes the owner and group of file.txt.

18 . ps:

Displays currently running processes.

Example: ps aux shows detailed information about all running processes.

19 kill:

Terminates a process by PID.

Example: kill 1234 terminates the process with PID 1234.

20 top:

Displays real-time system resource usage.

Example: top shows an interactive view of system processes and resource usage.

21 df:

Reports file system disk space usage.

Example: df -h displays disk usage in a human-readable format.

22 du:

Estimates file and directory space usage.

Example: du -sh /home/user shows the total space used by /home/user.

23 ifconfig (or ip addr):

Configures network interfaces.

Example: ifconfig shows network interface configurations; ip addr shows detailedIP address info.

24 ping:

Tests network connectivity.

Example: ping google.com sends ICMP echo requests to google.com.

25 wget:

Downloads files from the web.

Example: wget http://example.com/file.zip downloads file.zip from the specifiedURL.

26 curl:

Transfers data from or to a server.

Example: curl http://example.com fetches the content from example.com.

27 tar:

Archives files.

Example: tar -czvf archive.tar.gz /path/to/directory creates a compressed archive of the directory.

28 sudo:

Executes a command with superuser privileges.

Example: sudo apt-get update runs the apt-get update command as the superuser.

29 apt-get (or yum for RHEL/CentOS):

Manages packages (Debian-based systems).

Example: sudo apt-get install package installs a package; yum is used similarly on RPM-based systems.

30 ssh:

Connects to a remote machine via SSH.

Example: ssh user@hostname connects to hostname as user.