**Assignment No 5 [1]**

**Question:** Write 30 linux commands with example?

**Solution:**

**1. ls**: Lists directory contents.

Syntax: ls [options] [file(s) or directory]

Example: ls -l /home/user

**2. cd**: Changes the current directory.

Syntax: cd [directory]

Example: cd /var/www/html

**3. pwd**: Prints the current working directory.

Syntax: pwd

Example: pwd

**4. mkdir**: Creates a new directory.

Syntax: mkdir [options] directory\_name

Example: mkdir foldername

**5. rmdir**: Removes empty directories.

Syntax: rmdir [options] directory\_name

Example: rmdir foldername

**6. cp**: Copies files and directories.

Syntax: cp [options] source\_file(s) destination

Example: cp file1.txt /home/user

**7. mv**: Moves or renames files and directories.

Syntax: mv [options] source destination

Example: mv file1.txt /home/user

**8. rm**: Removes (deletes) files or directories.

Syntax: rm [options] file(s)

Example: rm file1.txt

**9. touch**: Updates the access and modification times of files or creates empty files.

Syntax: touch [options] filename(s)

Example: touch file.txt

**10. cat**: Concatenates and displays the content of files.

Syntax: cat [options] file(s)

Example: cat file.txt

**11. less**: Views the content of files interactively.

Syntax: less [options] file(s)

Example: less file.txt

**12. head**: Outputs the first part of files.

Syntax: head [options] file(s)

Example: head -n 10 file.txt

**13. tail**: Outputs the last part of files.

Syntax: tail [options] file(s)

Example: tail -n 20 file.txt

**14. grep**: Searches for patterns in files.

Syntax: grep [options] pattern [file(s)]

Example: grep "error" logfile.txt

**15. find**: Searches for files in a directory hierarchy.

Syntax: find [path...] [expression]

Example: find /home/user -name "\*.txt"

**16. chmod**: Changes file permissions.

Syntax: chmod [options] mode file(s)

Example: chmod 644 file.txt

**17. chown**: Changes file owner and group.

Syntax: chown [options] new\_owner:new\_group file(s)

Example: chown user:group file.txt

**18. sudo**: Executes a command with superuser privileges.

Syntax: sudo [command]

Example: sudo apt-get update

**19. su**: Switches user ID or becomes another user.

Syntax: su [options] [user]

Example: su user

**20. ps**: Displays information about running processes.

Syntax: ps [options]

Example: ps aux

**21. kill**: Sends a signal to terminate processes.

Syntax: kill [options] pid(s)

Example: kill -9 1234

**22. top**: Displays real-time information about running processes.

Syntax: top

Example: top

**23. df**: Reports file system disk space usage.

Syntax: df [options] [file(s)]

Example: df -h

**24. du**: Estimates file space usage.

Syntax: du [options] [file(s)]

Example: du -sh /home/user

**25. tar**

Definition: Archives files into a tarball.

Syntax: tar [options] [file(s)]

Example: tar -czvf archive.tar.gz directory

**26. zip**: Packages and compresses files into a zip archive.

Syntax (zip): zip [options] zipfile files

Example: zip -r archive.zip directory

**27. unzip**: Extracts files from a zip archive.

Syntax (unzip): unzip [options] zipfile

Example: unzip archive.zip

**28. wget**: Downloads files from the web.

Syntax: wget [options] [URL(s)]

Example: wget <https://example.com/file.zip>

**29. ssh**: Connects to a remote SSH server.

Syntax: ssh [user@]hostname [command]

Example: ssh user@hostname

**30. scp**: Securely copies files between hosts.

Syntax: scp [options] source destination

Example: scp file.txt user@hostname:/remote/path