LINUX PROGRAMMING

ASSIGNMENT-2

NAME:S.NIVETHA
USN NO:ENG24CY0191
ROLL NO:63
CLASS:CY_3

1. What does the command pwd, whoami, and hostname display?

pwd (Print Working Directory): Displays the full path of the current working directory.

whoami: Prints the effective username of the currently logged-in user.

hostname: Shows the system's hostname (computer name).

2. Write the command to create a directory named 'project' inside /home/student and keep three .txt files into it.

Commands:

mkdir -p /home/student/project

cd /home/student/project

touch file1.txt file2.txt file3.txt

Explanation:

- mkdir -p → Creates the directory.

- cd → Moves into the new directory.

- touch → Creates three empty text files.

3. Explain the difference between absolute path and relative path with proper examples.

Absolute Path: Complete path from the root (/). Example: /home/student/project/file1.txt

Relative Path: Path relative to the current directory. Example: ./project/file1.txt

4. What command will give you the already executed command traces in the terminal.

The 'history' command displays previously executed commands.

Example: history | grep ls

5. Compare the working functionality of find and locate command. Which one is faster and why?

find: Searches in real-time through the filesystem, slower but accurate.

locate: Uses a pre-built database, much faster.

Faster: locate, since it searches an index instead of scanning directories.

6. Which command is used to modify file permissions in Linux? Give an example.

The chmod command is used.

Example: chmod 755 file.txt

Explanation: Owner can read/write/execute, group and others can read/execute.

7. A file has permissions -rw-r--r--. What does this mean?

Owner: Read + Write

Group: Read only

Others: Read only

8. Explain the difference between chown and chgrp with an example.

chown: Changes file owner.

chgrp: Changes file group.

Example:

chown alice file.txt

chgrp students file.txt

9. A file needs to be accessible by multiple users but only writable by the owner. How will you set permissions?

Use: chmod 644 file.txt

Owner: Read + Write

Group: Read only

Others: Read only

10. How do you check the manual page for any Linux commands?

Use the man command.

Example: man ls