Linux Programming - Assignment 2

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Q1. What does the command pwd, whoami, and hostname display?

pwd: Prints the current working directory path.
whoami: Displays the username of the currently logged-in user.
hostname: Shows the system's network hostname (computer name).

Q2. Command to create a directory named 'project' inside /home/student and keep three .txt files in it.

Commands:
mkdir /home/student/project
cd /home/student/project
touch file1.txt file2.txt file3.txt

Q3. Difference between absolute path and relative path.

Absolute path: Complete path starting from root '/'. Example:
/home/student/project/file1.txt
Relative path: Path given with respect to current location. Example: if you are in
/home/student, then relative path is project/file1.txt

Q4. Command to view already executed command traces in terminal.

Command: history
This displays the list of previously executed commands.

Q5. Compare 'find' and 'locate' commands.

find: Searches files in real-time by scanning directories. Slower but always accurate.
locate: Uses a prebuilt database to find files quickly. Faster but may show outdated results if
the database is not updated.

Q6. Which command modifies file permissions?

Command: chmod
Example: chmod 755 file.txt

Q7. File permission '-rw-r--r--'. What does this mean?

Owner: read and write
Group: read only
Others: read only
So the owner can edit, while others can only view.

Q8. Difference between chown and chgrp.

chown: Changes the owner of a file.
chgrp: Changes the group ownership of a file.
Example: chown user1 file.txt → owner becomes user1
Example: chgrp group1 file.txt → group becomes group1

Q9. File accessible by all users but writable only by owner.

Use chmod 644 file.txt
Permissions: owner can read/write, group can read, others can read.

Q10. How to check manual page for Linux commands?

Use the 'man' command.
Example: man ls → shows the manual page for the ls command.