### 📝 **Assignment 2: Linux Terminal & File Operations Practice**

**Goal:** Use Linux terminal commands to create, navigate, and manage files and directories.

**Steps:**

1. Open your terminal.
2. Create a directory called practice.
3. Inside practice, create two directories: docs and scripts.
4. Navigate into docs and create three empty text files: file1.txt, file2.txt, file3.txt.
5. Write some text in file1.txt using the cat or vim command.
6. Display the contents of file1.txt.
7. Copy file1.txt into file2.txt.
8. Rename file3.txt to notes.txt.
9. Move notes.txt from docs to scripts.
10. Display the current working directory at each step.
11. Use ls -l to check the permissions of files and directories.
12. Change permissions of scripts directory to allow everyone read and execute (chmod 755 scripts).
13. Use grep to find a specific word in file2.txt.
14. Use history to display your recent commands.
15. Try creating an alias for a frequently used command and test it.

**Bonus:** Use find to locate notes.txt anywhere under practice.

Learnings

**Tasks Performed:**

* Created and navigated through directories using mkdir, cd, and pwd.
* Created and edited files using touch, cat, and optionally vim.
* Viewed and manipulated file contents with commands like cat, cp, mv, and ls.
* Renamed files and moved them between directories.
* Checked and modified file and directory permissions using ls -l and chmod.
* Searched text within files using grep.
* Viewed command history with history.
* Created and tested command aliases using alias.
* Located files with the find command.

### ****Key Learnings:****

1. **Filesystem navigation**: You gained confidence using cd, pwd, and ls to move around and explore directories.
2. **File creation and editing**: You learned different ways to create (touch, cat >) and edit files, which is essential in scripting and system tasks.
3. **File operations**: You practiced copying (cp), renaming (mv), and moving files, which are core terminal skills.
4. **Permissions**: Using ls -l and chmod, you learned how file permissions work and how to control access (e.g., chmod 755).
5. **Text search**: grep showed how to search inside files, useful for logs and config files.
6. **Command history & aliases**: You now know how to recall past commands and speed up your workflow using aliases.
7. **File discovery**: find is powerful for locating files across directories—a must-know for real-world Linux work.