Linux System Administration Lab: File and Directory Management

📋 Project Description

This hands-on lab demonstrates proficiency in fundamental system administration tasks via command line interface (CLI) in a Linux environment. The main focus was on organizing directory structures, securely handling data files, and editing configuration files/notes.

🛠️ Tools Used

• Operating System: Linux (Debian/Ubuntu-based distribution)

• Interface: Bash Terminal

• Text Editor: GNU Nano

🚀 Tasks Performed

1. Environment Organization

• Directory Creation: Creation of the /logs folder to centralize system logs using mkdir.

• Directory Cleanup: Removal of obsolete temporary directories (temp) using the rmdir command (for empty folders) and rm -r (for recursive removal).

2. Data and Report Management

• File Movement: Transfer of the quarterly patch report (Q3patches.txt) to the official reports directory (/reports) using mv.

• Data Integrity: Verification of the movement using the ls command, ensuring that reports Q1, Q2, and Q3 were consolidated in the correct destination.

3. File Manipulation and Editing

• Documentation Creation: Generation of a new task file (tasks.txt) using the touch command.

• Terminal Editing: Use of the Nano editor to insert structured data into the file, demonstrating the ability to edit settings without a graphical interface.

• Content Inspection: Use of the cat command to validate the persistence of the saved data.

🧠 Skills Demonstrated

• Fluid navigation in the file system (cd, pwd).

• Directory hygiene and organization in server environments.

• File lifecycle management (Creation, Movement, Editing, and Deletion).

• Use of absolute and relative paths for operational precision.