

Practical Questions: File Management in Linux

1. Create and Manage Files

Scenario:

You are setting up a new project. You need to create some text files to store configuration.

✓ Task:

- Create a directory named `projectX`
- Inside it, create 3 empty files: `config.txt`, `notes.txt`, `log.txt`
- Use `touch` and `ls -l` to confirm

2. Copying and Moving Files

Scenario:

You accidentally saved a file in the wrong folder. You need to move it to the correct one.

✓ Task:

- Create a file `temp.txt` in `/home/student/`
- Move it to `/home/student/projectX/`
- Then copy `temp.txt` as `backup.txt` in the same folder

3. Renaming Files

Scenario:

You saved a file with a wrong name. Now you want to rename it.

✓ Task:

- Rename `config.txt` to `main_config.txt`
- Check with `ls`

4. Deleting Files and Directories

Scenario:

Your directory has outdated files. You want to delete them.

Task:

- Create a folder `old_files/` and add 3 test files
- Delete one file using `rm`
- Delete the entire folder using `rm -r old_files/`

5. File Content Operations

Scenario:

You want to review, edit, and append content in files.

Task:

- Use `cat`, `echo`, `>>`, and `>` to:
 - Create a file `report.txt` and write "Project Report" inside
 - Append the line "Submitted by Team A"
 - Display the full content using `cat report.txt`

6. Compare Two Files

Scenario:

You have two configuration files and want to find the difference.

✓ **Task:**

- Create two files `configA.txt` and `configB.txt` with different content
- Use `diff configA.txt configB.txt` to compare

7. Searching Files with Pattern

Scenario:

You forgot where you saved your file but remember the filename contains "invoice".

✓ **Task:**

- Use `find` command to locate all files with "invoice" in the name under your home directory

8. Count Number of Lines and Words

Scenario:

You want to check the size of a log file in terms of lines and words.

✓ **Task:**

- Create a sample file with content using `echo` or manually
- Use `wc -l`, `wc -w`, and `wc -c` on the file

♦ 9. Redirect Output to File

Scenario:

You want to store the output of a command into a file for future reference.

✓ **Task:**

- Run `ls -l /etc` and redirect output to a file called `etclist.txt`

10. Using Wildcards in File Operations

Scenario:

You have many .log files and want to delete them all at once.

✓ Task:

- Create multiple files: a.log, b.log, c.txt
- Delete only .log files using:

11. Display First or Last Few Lines of a File

Scenario:

You have a log file and want to see the latest 10 lines.

✓ Task:

- Create a test log file with 20 lines using a loop
- Use `tail -n 10` and `head -n 5`

12. Find File Size and Disk Usage

Scenario:

You want to know how much disk space a folder is using.

✓ Task:

- Use `du -sh <directory>`
- Use `ls -lh` to check file size in human-readable format

