🧪 Linux Day 3 – Hands-On Practice Tasks

🔹 Task 1: Directory Structure Creation

📌 Create the following structure inside your home directory:

```
linux_lab/
├── projectA/
│       ├── src/
│       └── logs/
└── projectB/
        ├── src/
        └── backup/
```

Requirements:

- Use a single **command** wherever possible.

- Verify structure using `ls -R`.

🔹 Task 2: File Creation & Manipulation

Inside `projectA/src/`:

Create 5 files:

`app1.txt to app5.txt`

1. Add below content to each

Hello Everyone,

Good Evening!

I'm learning Linux.

2. Append below additional content in `app3.txt`

Linux is fun to learn!

◆ Task 3: Copy Operations

Copy:

`app1.txt and app2.txt`

1. from `projectA/src/` to `projectB/src/`.

2. Copy the entire `projectA` directory into `backup`.

Verify copied files using:

`ls -l`

◆ Task 4: Move & Rename

1. Rename:

   `app3.txt → application3.txt`

2. Move:

   `app4.txt` to `projectB/src/`.

3. Rename directory:

   `projectB → projectBeta`

◆ Task 5: Absolute vs Relative Path

📌 Current directory:

```
/home/ec2-user/linux_lab/projectA/logs
```

From here:

Read file:

```
/home/ec2-user/linux_lab/projectA/src/app1.txt
```

1. using **absolute path**.

2. Now read the same file using **relative path**.

Move to:

```
projectBeta/src
```

3. using relative navigation only.

◆ Task 6: Remove Operations (Careful ⚠️)

1. Delete: `app5.txt`
2. Remove empty directory `logs`.
3. Remove entire directory:`backup`
4. Try:

   ```
   rm -r *
   ```

Inside a test directory (NOT home directory).

◆ Task 7: Understanding `ll` Output

Run:

```
ll
```

Identify:

- File type

- Owner

- Group

- File size

- Last modified time

Write an explanation for any one file.

◆ Task 8: Wildcard Practice

1. Create:

   `test1.txt to test10.txt`

2. Delete:

   `test1.txt to test5.txt`

3. Delete remaining using wildcard.

◆ Task 9: Navigation Mastery

From your home directory:

1. Go to `linux_lab/projectA/src`

2. Move 2 directories up

3. Switch to previous directory using `cd -`

4. Go to root `/`

5. Return back to home in one command

◆ Task 10: Manual Page Research

1. Open: `man mkdir`

   Find:

   a. What does `-p` do?

2. Open: `man rm`

   Find:

   a. What does `-f` option do?

🎯 Bonus Challenge (Real Scenario)

Create a mini project:

Create:

```
devops_lab/
├── scripts/
├── configs/
└── logs/
```

1. Create 3 dummy config files with name config{1/2/3}.cfg

2. Copy configs into backup directory.

3. Rename one config2.cfg file to test.txt

4. Delete logs directory.