

Linux Fundamentals: Detailed Project Guide for Students

Objective:

In this project, students will practice Linux commands by creating a structured text-based 'Tech Diary'. The diary should include details like basic personal info (not sensitive), favorite commands, and a mini logbook of executed commands. Students will format their diary neatly, compress it, and finally upload it to GitHub.

Steps to Follow

Step	Details
1. Create a Project Directory	Use mkdir and cd to make a folder for your project: mkdir linux_project cd linux_project
2. Create and Organize Files	Make three files: touch profile.txt commands.txt log.txt
3. Add Content	Fill 'profile.txt' with your name and roll number only. Fill 'commands.txt' with your 5 favorite Linux commands and their purpose. Use history command to add 5 commands you executed into 'log.txt'.
4. Edit Files Neatly	Use nano or vim to format files properly with headings.
5. Merge Files	Merge all files into one 'tech_diary.txt': cat profile.txt commands.txt log.txt > tech_diary.txt
6. Add ASCII Art or Quotes	Decorate the final file with ASCII art or motivational quotes.

7. Compress the Project

```
zip linux_project.zip *.txt
```

8. Upload to GitHub

Create a new GitHub repository, push your project folder, and include 'tech_diary.txt'.
Share the GitHub repository link for submission.

■ Commands You'll Practice

mkdir, cd, touch, echo, cat, nano/vim, history, zip, git

■ Final Output Example (tech_diary.txt)

```
===== My Linux Tech Diary =====  
Name : Student  
Name Roll No: 123456 --- Favorite Commands --- 1. ls - list files 2. pwd - show  
current directory 3. cat - read file 4. nano - edit file 5. zip - compress files ---  
Logbook --- $ ls $ mkdir project $ cd project $ touch file.txt $ echo "Hello Linux"  
>> file.txt Quote: "Keep learning, keep growing!"
```

■ Submission: Upload your project to a GitHub repository and submit the repository link.
Ensure
that 'tech_diary.txt' is included in your repo.

Deadline:

Submit your project by **23 Aug 2025, 11:59pm**

