# Assignment-1: Basic Linux Command Line Operations

## 1. Creating and Renaming Files/Directories

➤ Command:

mkdir test\_dir

cd test\_dir

touch example.txt

mv example.txt renamed\_example.txt

➤ Explanation:

Creates a new directory called 'test\_dir'.

Navigates into 'test\_dir'.

Creates an empty file named 'example.txt'.

Renames the file to 'renamed\_example.txt'.

## 2. Viewing File Contents

➤ Command:

cat /etc/passwd

head -n 5 /etc/passwd

tail -n 5 /etc/passwd

➤ Explanation:

Displays the full content of /etc/passwd.

Shows the first 5 lines of the file.

Shows the last 5 lines of the file.

## 3. Searching for Patterns

➤ Command:

grep "root" /etc/passwd

➤ Explanation:

Searches for lines containing the word 'root' in the /etc/passwd file.

## 4. Zipping and Unzipping

➤ Command:

zip -r test\_dir.zip test\_dir

unzip test\_dir.zip -d unzipped\_dir

➤ Explanation:

Compresses 'test\_dir' recursively into 'test\_dir.zip'.

Extracts the contents into a directory named 'unzipped\_dir'.

## 5. Downloading Files

➤ Command:

wget https://example.com/sample.txt

➤ Explanation:

Downloads the file from the specified URL.

## 6. Changing Permissions

➤ Command:

touch secure.txt

chmod 444 secure.txt

➤ Explanation:

Creates a file named 'secure.txt'.

Changes permissions to read-only for everyone (r--r--r--).

## 7. Working with Environment Variables

➤ Command:

export MY\_VAR="Hello, Linux!"

echo $MY\_VAR

➤ Explanation:

Sets an environment variable MY\_VAR.

Prints the value of MY\_VAR.

## ✅ Submission Guidelines

📷 Screenshots: Take a screenshot of each command executed in the terminal and include them in your `.doc` file or Google Doc.  
  
📁 GitHub: Create a GitHub repository named `linux-assignment-1` and push a file named `assignment-1.txt` or `assignment-1.docx` containing:  
- Commands used  
- Explanations  
- Screenshots (if in .docx)  
  
Example GitHub structure:  
  
linux-assignment-1/  
├── assignment-1.txt  
└── screenshots/  
 ├── step1.png  
 ├── step2.png  
 └── ...