# Linux Commands Practice – Assignment

## 1. Creating and Renaming Files/Directories

Commands:  
mkdir test\_dir  
cd test\_dir  
touch example.txt  
mv example.txt renamed\_example.txt  
  
Explanation:  
- mkdir test\_dir → Creates a new directory named test\_dir.  
- cd test\_dir → Navigates inside test\_dir.  
- touch example.txt → Creates an empty text file.  
- mv example.txt renamed\_example.txt → Renames the file.

## 2. Viewing File Contents

Commands:  
cat /etc/passwd  
head -n 5 /etc/passwd  
tail -n 5 /etc/passwd  
  
Explanation:  
- cat /etc/passwd → Displays the full file content.  
- head -n 5 → Displays the first 5 lines.  
- tail -n 5 → Displays the last 5 lines.

## 3. Searching for Patterns

Command:  
grep "root" /etc/passwd  
  
Explanation:  
- Searches and highlights all lines that contain the word "root" in /etc/passwd.

## 4. Zipping and Unzipping

Commands:  
cd ..  
zip -r test\_dir.zip test\_dir  
mkdir unzipped\_dir  
unzip test\_dir.zip -d unzipped\_dir  
  
Explanation:  
- zip -r test\_dir.zip test\_dir → Compresses test\_dir into a zip file.  
- mkdir unzipped\_dir → Creates a new folder.  
- unzip test\_dir.zip -d unzipped\_dir → Extracts contents into unzipped\_dir.

## 5. Downloading Files

Command:  
wget https://example.com/sample.txt  
  
Explanation:  
- wget → Downloads a file from the specified URL and saves it locally.

## 6. Changing Permissions

Commands:  
touch secure.txt  
chmod 444 secure.txt  
ls -l secure.txt  
  
Explanation:  
- chmod 444 secure.txt → Gives read-only permission to all users.  
- ls -l secure.txt → Shows permission status (r--r--r--).

## 7. Working with Environment Variables

Commands:  
export MY\_VAR="Hello, Linux!"  
echo $MY\_VAR  
  
Explanation:  
- export MY\_VAR="Hello, Linux!" → Sets an environment variable.  
- echo $MY\_VAR → Displays its value.