# Linux Practical Assignment

## 1. Creating and Renaming Files/Directories

* Commands:
* mkdir test\_dir
* cd test\_dir
* touch example.txt
* mv example.txt renamed\_example.txt
* cd ..
* Explanation:
* The 'mkdir' command is used to create a new directory named 'test\_dir'. Then, we navigate into it using 'cd'. The 'touch' command creates an empty file named 'example.txt'. We use 'mv' to rename it to 'renamed\_example.txt' and return to the parent directory.

## 2. Viewing File Contents

* Commands:
* cat /etc/passwd
* head -n 5 /etc/passwd
* tail -n 5 /etc/passwd
* Explanation:
* 'cat' displays the entire content of the file '/etc/passwd'. 'head -n 5' shows the first five lines, while 'tail -n 5' displays the last five lines of the file.

## 3. Searching for Patterns

* Commands:
* grep "root" /etc/passwd
* Explanation:
* 'grep' searches for the keyword 'root' in the file '/etc/passwd' and displays the matching lines.

## 4. Zipping and Unzipping

* Commands:
* zip -r test\_dir.zip test\_dir
* mkdir unzipped\_dir
* unzip test\_dir.zip -d unzipped\_dir
* Explanation:
* 'zip -r' compresses the 'test\_dir' directory into 'test\_dir.zip'. Then, we create a new directory named 'unzipped\_dir' and use 'unzip -d' to extract the contents into it.

## 5. Downloading Files

* Commands:
* wget https://example.com/sample.txt
* Explanation:
* 'wget' is used to download files from the internet. Replace the example URL with a valid one if needed.

## 6. Changing Permissions

* Commands:
* touch secure.txt
* chmod 444 secure.txt
* Explanation:
* 'touch' creates a new file named 'secure.txt'. 'chmod 444' sets read-only permissions for all users.

## 7. Working with Environment Variables

* Commands:
* export MY\_VAR="Hello, Linux!"
* echo $MY\_VAR
* Explanation:
* 'export' defines a new environment variable named 'MY\_VAR'. 'echo' is used to print its value.

## Submission Guidelines

* Explanation:
* Attach screenshots of each command's execution along with this document. Also, upload the code and document files to a GitHub repository and provide the repository link here.