Linux 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: Enters the test\_dir directory.  
- touch example.txt: Creates an empty file named example.txt.  
- mv example.txt renamed\_example.txt: Renames the file to renamed\_example.txt.

# 2. Viewing File Contents

Commands:  
 cat /etc/passwd  
 head -n 5 /etc/passwd  
 tail -n 5 /etc/passwd  
  
Explanation:  
- cat: Displays the entire contents of /etc/passwd.  
- head -n 5: Shows the first 5 lines of the file.  
- tail -n 5: Shows the last 5 lines of the file.

# 3. Searching for Patterns

Command:  
 grep "root" /etc/passwd  
  
Explanation:  
- grep "root": Searches for and displays all lines containing the word "root" in /etc/passwd.

# 4. Zipping and Unzipping

Commands:  
 cd ..  
 zip -r test\_dir.zip test\_dir  
 unzip test\_dir.zip -d unzipped\_dir  
  
Explanation:  
- zip -r: Compresses test\_dir into test\_dir.zip recursively.  
- unzip -d: Extracts the contents of test\_dir.zip into a new directory unzipped\_dir.

# 5. Downloading Files

Command:  
 wget https://example.com/sample.txt  
  
Explanation:  
- wget: Downloads files from the web using the provided URL.  
Note: Replace with a valid URL if the example.com one does not work.

# 6. Changing Permissions

Commands:  
 touch secure.txt  
 chmod 444 secure.txt  
  
Explanation:  
- touch secure.txt: Creates a new file named secure.txt.  
- chmod 444: Sets the file to read-only for user, group, and others.

# 7. Working with Environment Variables

Command:  
 export MY\_VAR="Hello, Linux!"  
 echo $MY\_VAR  
  
Explanation:  
- export: Sets and makes the environment variable available to sub-processes.  
- echo $MY\_VAR: Displays the value of the variable.

# Screenshots

Take screenshots of the terminal after each command execution. Place them in a separate folder or embed them here.

# GitHub Submission Guide

1. Create a new repo, e.g., linux-assignment.  
2. Inside the repo:  
 /screenshots  
 /commands.txt # Paste all terminal commands here  
 /README.md # Paste explanations and structure  
 /docs/assignment.docx # Export final Word or Google Doc here  
3. Commit and push:  
 git init  
 git add .  
 git commit -m "Initial commit"  
 git remote add origin <your-repo-URL>  
 git push -u origin main