1. Creating and Renaming Files/Directories

Create a directory named test_dir using mkdir.

Inside test_dir, create an empty file called example.txt.

Rename example.txt to renamed_example.txt using mv

```
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$ touch example.txt
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$ mv example.txt renamed_example.txt
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$ ls
renamed_example.txt  test_dir
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$ cd ..
```

2. Viewing File Contents

Use cat to display the contents of /etc/passwd.

```
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
_apt:x:42:65534::/nonexistent:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:998:998:systemd Network Management:/:/usr/sbin/nologin
systemd-timesync:x:996:996:systemd Time Synchronization:/:/usr/sbin/nologin
dhcpcd:x:100:65534:DHCP Client Daemon,,,:/usr/lib/dhcpcd:/bin/false
messagebus:x:101:101::/nonexistent:/usr/sbin/nologin
syslog:x:102:102::/nonexistent:/usr/sbin/nologin
systemd-resolve:x:991:991:systemd Resolver:/:/usr/sbin/nologin
uuidd:x:103:103::/run/uuidd:/usr/sbin/nologin
landscape:x:104:105::/var/lib/landscape:/usr/sbin/nologin
polkitd:x:990:990:User for polkitd:/:/usr/sbin/nologin
harshini:x:1000:1000:,,,:/home/harshini:/bin/bash
```

Display only the first 5 lines of /etc/passwd using head.

Display only the last 5 lines of /etc/passwd using tail.

3.Searching for Patterns

Use grep to find all lines containing the word "root" in /etc/passwd.

```
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B$ head -n 5 /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B$ tail -n 5 /etc/passwd
systemd-resolve:x:991:991:systemd Resolver:/:/usr/sbin/nologin
uuidd:x:103:103::/run/uuidd:/usr/sbin/nologin
landscape:x:104:105::/var/lib/landscape:/usr/sbin/nologin
polkitd:x:990:990:User for polkitd:/:/usr/sbin/nologin
harshini:x:1000:1000:,,,:/home/harshini:/bin/bash
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B$ grep "root" /etc/passwd
root:x:0:0:root:/root:/bin/bash
```

4. Zipping and Unzipping

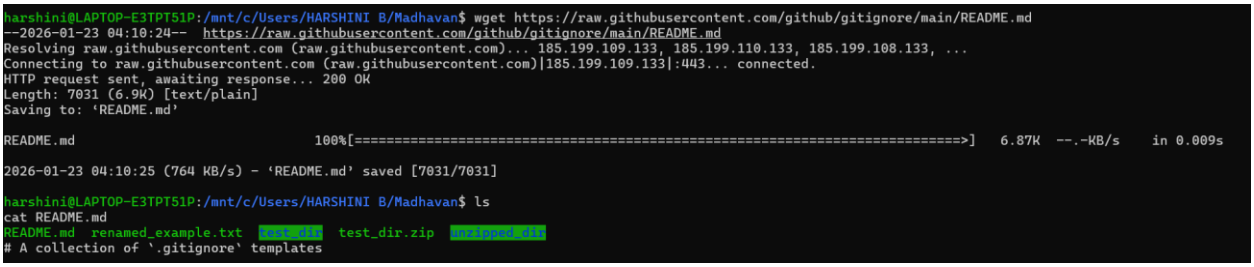
Compress the test_dir directory into a file named test_dir.zip using zip.

Unzip test_dir.zip into a new directory named unzipped_dir.

```
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$ zip -r test_dir.zip test_dir
  adding: test_dir/ (stored 0%)
  adding: test_dir/renamed_example.txt (stored 0%)
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$ mkdir unzipped_dir
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$ unzip test_dir.zip -d unzipped_dir
Archive:  test_dir.zip
   creating: unzipped_dir/test_dir/
 extracting: unzipped_dir/test_dir/renamed_example.txt
harshini@LAPTOP-E3TPT51P:/mnt/c/Users/HARSHINI B/Madhavan$
```

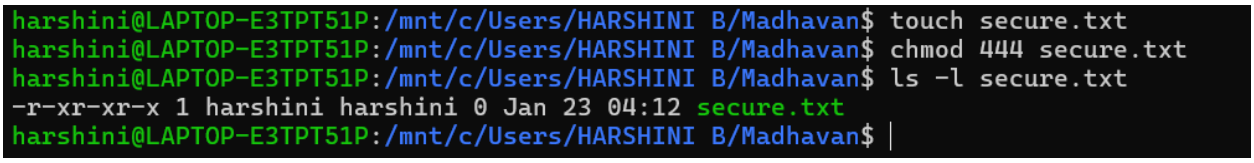
5. Downloading Files

Use wget to download a file from a URL (e.g., https://example.com/sample.txt).



6. Changing Permissions

Create a file named secure.txt and change its permissions to read-only for everyone using chmod.



7. Working with Environment Variables

Use export to set a new environment variable called MY_VAR with the value "Hello, Linux!".