1. Creating and Renaming Files/Directories

Create a directory named test_dir using mkdir.

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

=>First, I create the directory using mkdir command as shown in below screenshot.

=> Then, I used a touch command to create the 'example.txt' file inside test_dir by using "touch test_dir/example.txt"

(or I can use the cd (change directory) cmd to goto inside the test_dir then run touch example.txt also works)

```
~]$ mkdir test_dir
~]$ touch test_dir/example.txt
~]$ ls
s-practice  test_dir
```

```
[redacted]~]$ ls test_dir/
example.txt
```

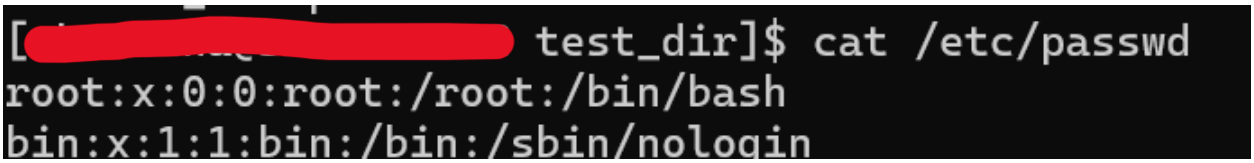
Rename example.txt to renamed_example.txt using mv

- ⇨ First, I used "cd" cmd to change the current directory (cd test_dir/).
- ⇨ then, run "mv" cmd to rename the "example.txt" file to "renamed_example.txt" file

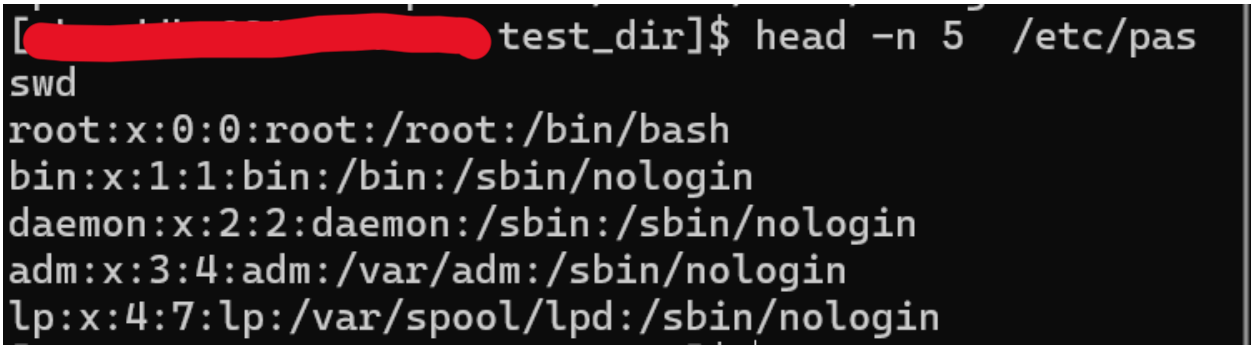
```
[redacted]~]$ cd test_dir/
[redacted]test_dir]$ mv example.txt rena
med_example.txt
[redacted]test_dir]$ ls
renamed_example.txt
```

2. Viewing File Contents

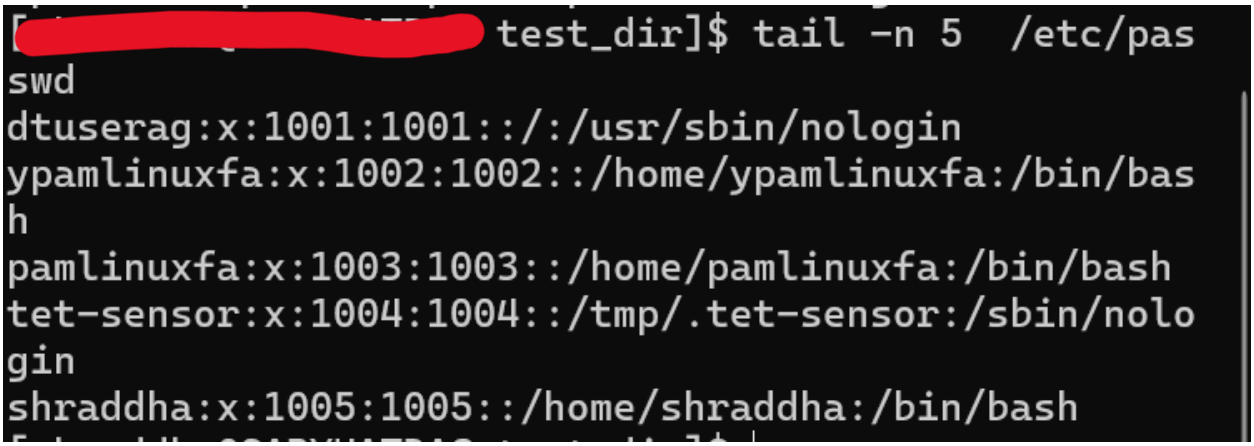
Use cat to display the contents of /etc/passwd. => cat command to view or display the content of the files.



Display only the first 5 lines of /etc/passwd using head. => with head command '-n 5' will show the only 5 lines from the top.



Display only the last 5 lines of /etc/passwd using tail. => with tail command '-n 5' will show the only last 5 lines from the bottom.



3.Searching for Patterns

Use grep to find all lines containing the word "root" in /etc/passwd. => here, I used "-n" with grep command to show the matching word with the line number.

```
[redacted test_dir]$ grep "root" -n /etc/passwd
1:root:x:0:0:root:/root:/bin/bash
10:operator:x:11:0:operator:/root:/sbin/nologin
```

4. Zipping and Unzipping

Compress the test_dir directory into a file named test_dir.zip using zip. => here, I used zip command to compressed the folder, "- r" is used for recursively means they compressed the folder or directory including all the sub files or folders inside in it.

"ls" command showing the compressed folder also 'test_dir.zip'.

zip -r <destination folder> <source folder>

```
[redacted ~]$ zip -r test_dir.zip test_dir
  adding: test_dir/ (stored 0%)
  adding: test_dir/renamed_example.txt (stored 0%)
[redacted ~]$ ls
devops-nodejs  devops-practice  test_dir  test_dir.zip
```

Unzip test_dir.zip into a new directory named unzipped_dir. => similarly, here I used unzip command to unzip the test_dir.zip folder into the new created directory 'unzipped_dir'.

"-d" : means directory

unzip <source_directory> -d <destination_directory>

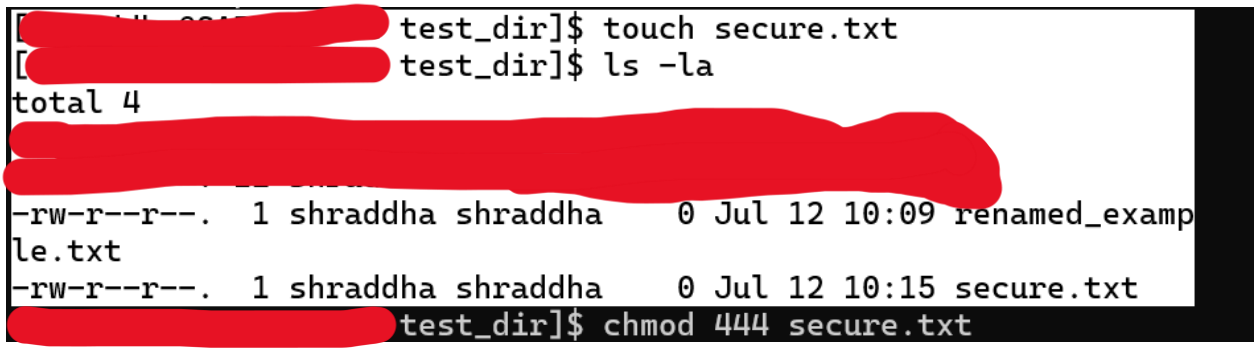
```
[redacted ~]$ mkdir unzipped_dir
[redacted ~]$ ls
devops-nodejs    test_dir      unzipped_dir
devops-practice  test_dir.zip
[redacted ~]$ unzip test_dir.zip -d unzipped_dir
Archive:  test_dir.zip
   creating: unzipped_dir/test_dir/
 extracting: unzipped_dir/test_dir/renamed_example.txt
[redacted ~]$ ls
devops-nodejs    test_dir      unzipped_dir
devops-practice  test_dir.zip
[redacted ~]$ ls unzipped_dir/
test_dir
```

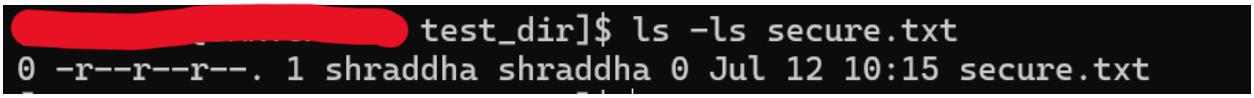
5. Downloading Files

Use wget to download a file from a URL (e.g., https://example.com/sample.txt). => I used wget to download the file but due to some privacy I interrupt the command in middle but as shown below screenshots it is working as expected.

6. Changing Permissions

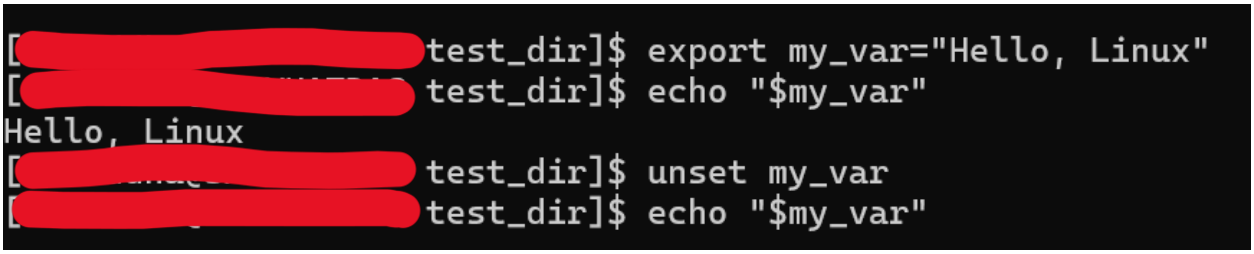
Create a file named secure.txt and change its permissions to read-only for everyone using chmod. => 444 means read-only permissions. So I used chmod 444 <fileName>





7. Working with Environment Variables

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



Submission Guidelines -: Attach Screenshots or command along with explanation and submit in doc(google doc or microsoft doc) format also attach github repo link