

LAB ASSIGNMENT-1

Subject: Operating system concepts using Unix/Linux

1. Display a list of currently logged-in users.

- Who -a
- Output
System boot 2025-02-20 08:10
Run-level5 2025-02-20 08:10
Student + tty2 2025-02-20 08:10 old2187(tty2)

2. Display only the usernames and the total number of logged in users.

- Who -q -H
- Output
Student
#users=1

3. Check your current user by running and logout from session.

- Whoami
- Output
student

4. Change your password and check your own identity.

- Passwd
- (current) unix password:Navdip

- Enter your unix password:abcd
- Retype new unix password:abcd
- Output
Passwd :password updated successfully

5. Display detailed system information.

- Uname -a
- Output
Linux tnrao-H510M-H 6.8.0-52-generic #53~22.04.1-
Ubuntu SMP PREEMPT_DYNAMIC Wed Jan 15 19:18:46
UTC 2 X86_64 X86_64 X86_64 GNU/Linux

6. Find out which kernel version and system architecture your system is running.

- Uname -v
- Output
#53~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Jan
15 19:18:46 UTC 2

7. Create a directory test_dir and inside it, move into test_dir and create 3 empty files: file1.txt, file2.txt, file3.txt into test_dir.

- Create directory

Mkdir test_dir

- Navigate into test_dir
Cd test_dir
- Create three empty files

Touch file1.txt file2.txt file3.txt

- Verify the files

Ls

❖ Output

file1.txt file2.txt file3.txt

8. Change the permissions of file1.txt to read-only for everyone.

- Read only permission
Chmod 444 file1.txt
- Verify the change

Ls -l file1.txt

❖ Output

-r--r--r--1 student student 0 feb 20 09:02 file1.txt

9. List all files with their details

Ls -l

❖ Output

-r--r--r--1 student student 0 feb 20 09:02 file1.txt

-rw-rw-r--1 student student 0 feb 20 09:02 file2.txt

-rw-rw-r--1 student student 0 feb 20 09:02 file3.txt

10. Display content of file1.txt, file2.txt and file3.txt with numbers.

```
Cat -n file1.txt file2.txt file3.txt
```

❖ Output

```
1 hello world
2 how are you
3
4 good morning
```

11. Rename file1.txt to myfile.txt

```
Mv file1.txt myfile.txt
```

- Verify the rename
Ls

❖ Output

```
File2.txt file3.txt myfile.txt
```

12. Delete directory test_dir with its files and sub directories and go back to home directory.

```
Rm -r test_dir
```