

Linux Programming: Assignment-2

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SECTION-3A

ROLL NO.-59

USN- ENG24CY0161

1.What does the command `pwd`, `whoami` and `hostname` display? (CO1)

pwd gives the directory path of the current folder you are in.

whoami prints the name of the user that is logged in.

hostname gives the name of your computer/machine in the network.

2. Write the command to create a directory named “project” inside the `/home/student` folder and keep three .txt file into it. Give output snapshot. (CO1)

```
mkdir /home/student/project
```

```
touch /home/student/project/file1.txt /home/student/project/file2.txt  
/home/student/project/file3.txt
```

OUTPUT:

```
ls /home/student/project
```

```
file1.txt file2.txt file3.txt
```

3. Explain the difference between absolute path and relative path with proper examples. (CO2)

An absolute path always begins at the root `/` and indicates the entire path to a file or folder.

Example: `/home/student/project/file1.txt`

A relative path is starting from the directory you are and it doesn't refer to the root `/`.

Example: If you are in `/home/student` directory, then `cd project` is a relative path.

4. What command will give you the already executed command traces in the terminal. Give output snapshot. (CO1)

The command is:

History

Sample Output:

1 ls

2 cd /home

3 mkdir project

4 history

5. Compare the working functionality of find and locate command. Which one is faster and why? (CO1)

find is a real-time tool that goes through the filesystem step by step. It is slower but always accurate as it takes the actual disk into consideration.

on the other hand, locate depends on a pre-built database (mlocate.db). It is very fast as it doesn't go to the disk to search but rather to the database.

Therefore locate is quicker as it refers to a stored index rather than performing a scan.

6. Which command is used to modify file permissions in Linux? Give an example. (CO1)

Bash

chmod 755 file.txt

7. A file has permissions -rw-r--r--. What does this mean? (CO1)

-rw-r--r-- stands for:

Owner: reading + writing

Group: reading only

Others: reading only

Only the owner is allowed to change the file

8. Explain the difference between chown and chgrp with an example. (CO1)

chown changes the owner of a file.

Example:

```
chown student file.txt
```

chgrp changes only the group of the file.

Example:

```
chgrp staff file.txt
```

9. A file needs to be accessible by multiple users but only writable by the owner. How will

Use:

```
chmod 644 filename
```

Owner: read + write

Group: read

Others: read

10. How do you check the manual page for any Linux commands? (CO1)

Use the **man** command:

```
man ls
```

This opens the manual page for the command.