

Assignment-1

```
labex:project/ $ pwd
/home/labex/project
labex:project/ $ ls
sohan
labex:project/ $ ls -l
total 0
drwxrwxr-x 2 labex labex 23 Feb  9 19:37 sohan
labex:project/ $ whoami
labex
```

Explain the purpose of pwd, ls, and clear.?

What information does the history command provide?

The pwd command is used to display the current working directory, helping users know their exact location in the Linux file system. The ls command lists all files and directories present in the current directory, making it easier to view contents, while options like -l and -a provide detailed and hidden file information. The clear command is used to clear the terminal screen, improving readability by removing previous outputs. Additionally, the history command displays a list of previously executed commands along with their command numbers, which is useful for reviewing, reusing, and managing past terminal activities.

Assignment-2

```
labex:week2/ $ mkdir os_hw
labex:week2/ $ cd os_hw
labex:os_hw/ $ mkdir week1 week2 week3
labex:os_hw/ $ cd week2
labex:week2/ $ cd ..
labex:os_hw/ $ rmdir week3
labex:os_hw/ $ ls
week1 week2
labex:os_hw/ $
```

Assignment-3

```
labex:OS_HW/ $ touch info.txt
labex:OS_HW/ $ cat > info.txt
linux is good os
i love linux
we love linux
no one hates linux
we use linux
labex:OS_HW/ $ touch backup.txt
labex:OS_HW/ $ cp info.txt backup.txt
labex:OS_HW/ $ mv linux_backup.txt backup.txt
mv: cannot stat 'linux_backup.txt': No such file or directory
labex:OS_HW/ $ mv backup.txt linux_backup.txt
labex:OS_HW/ $ rm linux_backup.txt
```

Assignment-4

```
linux is good os
i love linux
we love linux
no one hates linux
we use linux
9/2/2026
```

```
Labex:OS_HW/ $ cat info.txt
linux is good os
i love linux
we love linux
no one hates linux
we use linux
Labex:OS_HW/ $ more info.txt
linux is good os
i love linux
we love linux
no one hates linux
we use linux
Labex:OS_HW/ $ less info.txt
Labex:OS_HW/ $ nano info.txt
Labex:OS_HW/ $ cat info.txt
linux is good os
i love linux
we love linux
no one hates linux
we use linux
9/2/2026
Labex:OS_HW/ $
```

What is the difference between nano and vi?

nano is a simple and beginner-friendly text editor in Linux that allows users to directly type, edit, and save files using straightforward keyboard shortcuts like Ctrl + O to save and Ctrl + X to exit. In contrast, vi is a more powerful and complex editor that uses multiple modes—Command mode, Insert mode, and Last line mode—offering advanced features such as search, replace, macros, and precise navigation. While nano is suitable for quick edits and beginners, vi is preferred by programmers and system administrators for tasks that require more control and efficiency.