UNIX Command

● INTRODUCTION TO UNIX

Unix commands are a set of commands that are used to interact with the Unix operating system. Unix is a powerful, multi-user, multi-tasking operating system that was developed in the 1960s by Bell Labs. Unix commands are entered at the command prompt in a terminal window, and they allow users to perform a wide variety of tasks, such as managing files and directories, running processes, managing user accounts, and configuring network settings. Unix is now one of the most commonly used Operating systems used for various purposes such as Personal use, Servers, Smartphones, and many more.

Unix is an OS that provides both CLI and GUI-based interaction. It was developed by Dennis Ritchie in the C language. Unix operating system is multitasking, which also gives an opportunity for two or more users to use its benefits. In other words, it is a multi-user OS. Ubuntu OS is a Unix version that enables us to do every work that Unix is supposed to do.
It's made up of three parts:

➢ The kernel
The hub of the operating system, it allocates time and memory to programs and handles the filestore and communications.

➢ Shell
Interprets commands and calls the desired program. The shell uses standard syntax for all commands.

➢ Commands and Utilities
There are over 250 standard commands, plus numerous others provided through third-party software. Commands and utilities include cp, mv, cat, and grep.

- **UNIX Commands**

  - **ls:** Lists the contents of the current directory.

  ```
  $ ls
  ls

  directory_1
  export "PS1=$ "
  ```

  - **cd:** Changes the current directory.

  ```
  $ cd folder_1
  cd folder_1

  bash: cd: folder_1: No such file or directory
  export "PS1=$ "
  ```

  - **pwd:** Prints the working directory.

  ```
  $ pwd
  pwd

  /home/cg/root/661b857d13438
  export "PS1=$ "
  ```

  - **mkdir:** Creates a new directory.

  ```
  export "PS1=$ "
  $ mkdir directory_1
  mkdir directory_1
  ```

○ **rmdir:** Removes an empty directory.

```
$ rm file_1.txt
rm file_1.txt


export "PS1=$ "
export "PS1=$ "
```

○ **touch:** Creates a new file or updates the timestamp of an existing file.

```
$ touch file_1.txt
touch file_1.txt


export "PS1=$ "
```

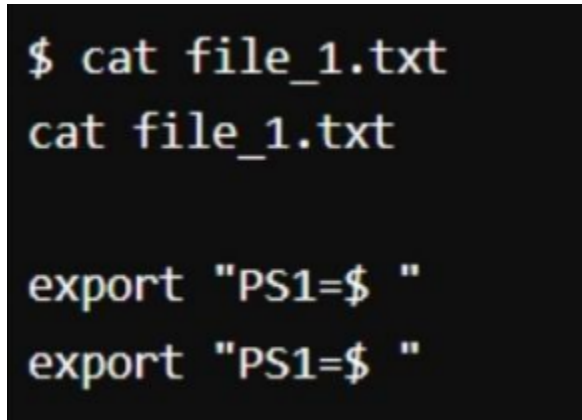○ **cat:** Concatenates files and prints them to stdout.

```
$ cat file_1.txt
cat file_1.txt


export "PS1=$ "
export "PS1=$ "
```

○ **cp:** Copies a file or directory.

```
$ cp spider jerry
cp spider jerry
```
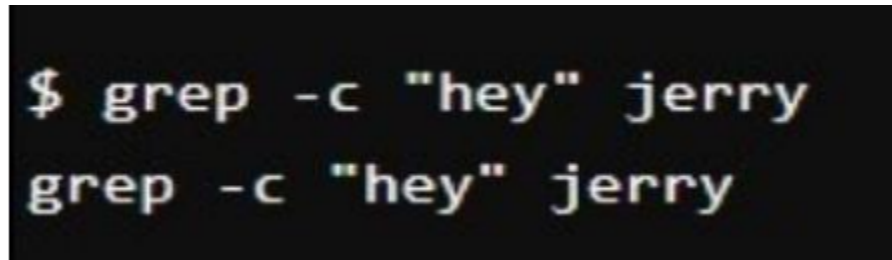
- **mv:** Moves a file or directory.

- **rm:** Removes a file or directory.

- **cat:** Concatenates files and prints them to stdout.

```
$ cat file_1.txt
cat file_1.txt


export "PS1=$ "
export "PS1=$ "
```

- **grep:** Searches for a pattern in a file or files.

```
$ grep -c "hey" jerry
grep -c "hey" jerry
```

- **head:** Prints the first few lines of a file.

- **tail:** Prints the last few lines of a file.

- **sort:** Sorts the lines of a file.

- **uniq:** Removes duplicate lines from a file.

- **wc:** Counts the number of lines, words, and characters in a file.

- **find:** Searches for files and directories that meet a certain criteria.

- **tar:** Creates and manages archive files.

- **gzip:** Compresses files.

- **unzip:** Decompresses files.