

# Jawahar Education Society's A. C. Patil College of Engineering, Kharghar Navi Mumbai 410210

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Course Name: C.S.E. (IoT CS BC)

Course code: CSL403

Year: S.E. Semester: IV

Roll No.: 17

# **Experiment Evaluation Sheet**

Experiment No.: 1

Experiment Name: Explore usage of basic Linux commands

| Sr No. | Evaluation Criteria    | Marks<br>(Out of 9) | Performance<br>Date | Correction Date and Signature of Instructor |
|--------|------------------------|---------------------|---------------------|---|
| 1      | Experiment Performance |                     |                     |   |
| 2      | Journal Performance    |                     |                     |   |
| 3      | Punctuality            |                     |                     |   |
| Total  |                        |                     |                     |   |

## A. C. Patil College of Engineering

**Python Lab** 

**Aim**: To explore basic usage of Linux commands like mkdir, cd, pwd, touch, cat chown, chmod etc.

**Software required:** Terminal

## Theory:

The Linux command is a utility of the Linux operating system. All basic and advanced tasks can be done by executing commands. The commands are executed on the Linux terminal. The terminal is a command-line interface to interact with the system, which is similar to the command prompt in the Windows OS. Commands in Linux are case-sensitive.

Linux provides a powerful command-line interface compared to other operating systems such as Windows and MacOS. We can do basic work and advanced work through its terminal. We can do some basic tasks such as creating a file, deleting a file, moving a file, and more. In addition, we can also perform advanced tasks such as administrative tasks (including package installation, user management), networking tasks (ssh connection), security tasks, and many more.

### 1. pwd Command

The pwd command is used to display the location of the current working directory.

#### 2. mkdir Command

The mkdir command is used to create a new directory under any directory.

#### 3. Is Command

The ls command is used to display a list of content of a directory.

#### 4. cd Command

The cd command is used to change the current directory.

### 5. touch Command

The touch command is used to create empty files. We can create multiple empty files by executing it once.

#### 6. cat Command

The cat command is a multi-purpose utility in the Linux system. It can be used to create a file, display content of the file, copy the content of one file to another file, and more.

#### 7. chown Command

The chown command is used to change the owner of the file.

### 8. chgrp Command

The chgrp command is used to change group owner of the file.

#### 9. chmod Command

The chmod command is used to chang the read write and execute permissions of a file.

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## **Output:**

```
chetan_i_007@HP-15-BS661TX:~$ mkdir OSPractical01
chetan_i_007@HP-15-BS661TX:~$ cd OSPractical01/
chetan i 007@HP-15-BS661TX:~/OSPractical01$ pwd
/home/chetan i 007/OSPractical01
chetan i 007@HP-15-BS661TX:~/OSPractical01$ touch file.txt
chetan_i_007@HP-15-BS661TX:~/OSPractical01$ ls
file.txt
chetan i 007@HP-15-BS661TX:~/OSPractical01$ nano file.txt
chetan_i_007@HP-15-BS661TX:~/OSPractical01$ cat file.txt
Hello World!
chetan_i_007@HP-15-BS661TX:~/OSPractical01$ ls -l
-rw-rw-r-- 1 chetan i 007 chetan i 007 14 Jan 18 20:42 file.txt
chetan i 007@HP-15-BS661TX:~/OSPractical01$ sudo chown root file.txt
[sudo] password for chetan_i_007:
chetan_i_007@HP-15-BS661TX:~/OSPractical01$ ls -l
-rw-rw-r-- 1 root chetan i 007 14 Jan 18 20:42 file.txt
chetan_i_007@HP-15-BS661TX:~/OSPractical01$ sudo chgrp root file.txt
chetan i 007@HP-15-BS661TX:~/OSPractical01$ ls -l
total 4
-rw-rw-r-- 1 root root 14 Jan 18 20:42 file.txt
chetan i 007@HP-15-BS661TX:~/OSPractical01$ sudo chmod 744 file.txt
chetan_i_007@HP-15-BS661TX:~/OSPractical01$ ls -l
total 4
-rwxr--r-- 1 root root 14 Jan 18 20:42 file.txt
```

#### **Conclusion:**

With this practical we understood how to use bacic Linux commands like mkdir, cd, pwd, touch, cat chown, chmod etc.

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