Experiment No. 1
Explore the internal and external commands of the linux
Date of Performance: 9/1/2024
Date of Submission:

Name:- Jenil

Kotadia

Roll no :- 19/ Div 2

Experiment 1:

Title:- Explore the internal and external commands of the linux

Objectives:- The linux command is utility of the linux operating system all basics and advancedtasks can be done by executing commands .

Theory:- They are grouped into two categories:

- Internal commands:-

Commands which are built into the shell. For all the shell built-in commands, execution of the same is fast in the sense that the shell doesn't have to search the given path for them in the PATH variable,and also no process needs to be spawned for executing it.
Examples: source, cd, fg, etc.

- External commands:-

Commands which aren't built into the shell. When an external command has to be executed, the shell looks for its path given in the PATH variable, and also a new process has to be spawned andthe command gets executed. They are usually located in /bin or /usr/bin. For example, when you execute the "cat" command, which usually is at /usr/bin, the executable /usr/bin/cat gets executed.Examples: ls, cat etc.

Description:-

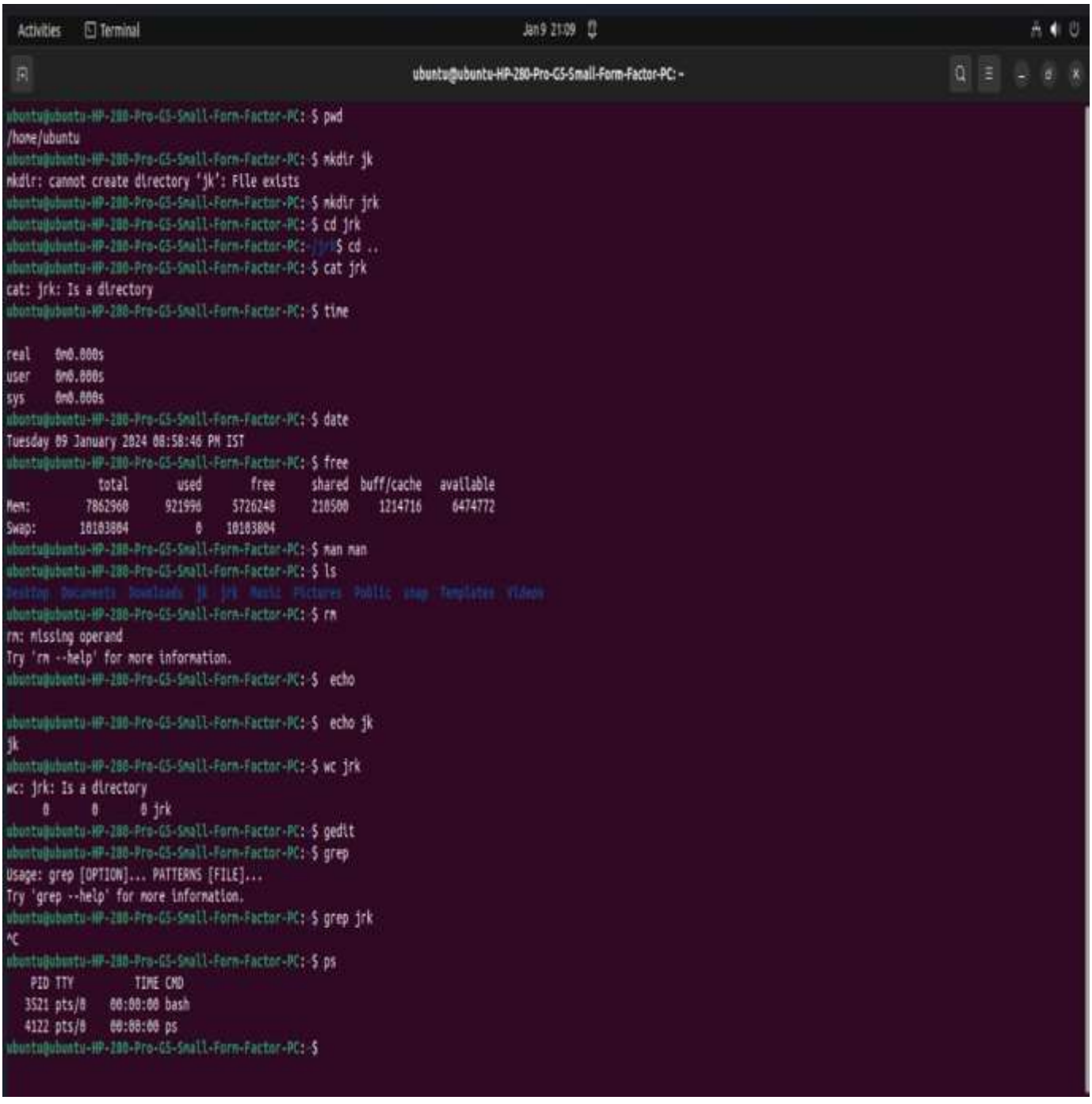
Commands:-

- pwd: Print the current working directory.
- mkdir: Create a new directory.
- cd: Change directory.
- cd ..: Move to the parent directory.

- cd/: Move to the root directory.
- touch: Create an empty file.
- ls: List files and directories.
- cat: Display the contents of a file.
- mv: Move or rename files/directories.

- grep: Search for a pattern in files.
- rm: Remove/delete files or directories.
- date: Display the current date and time.
- time: Measure the execution time of a command.
- free: Display amount of free and used memory in the system.
- echo: Print text to the terminal.
- clear: Clear the terminal screen.
- exit: Exit the current shell or terminal.
- man: Display the manual page for a command.
- gedit: Open a text editor.
- ps: Display information about active processes.
- wc: Count lines, words, and characters in a file.
- chmod: Change file permissions.
- chown: Change file owner and group.

Output :-



Conclusion :-

In summary, a solid grasp of both internal and external commands in Linux is crucial for effectivesystem management. Internal commands handle basic tasks within the shell, while external commands offer extended functionalities. Proficiency in navigating and utilizing this

diverse command set enhances users' ability to perform a wide range of tasks. Regular exploration and practice with Linux commands contribute to increased efficiency and mastery of system administration.