

OPERATING SYSTEM

(4ITRC2)

LAB ASSIGNMENT 2

Aim: To study and understand Ubuntu Commands.

To perform: Execute different Commands.

To Submit:

Part 1: Outputs of the following commands.

- **pwd:** Print working Directory.
- **cd:** Change Directory.
- **ls:** List of information about files.
- **mkdir:** Create new folder.
- **rm:** Remove files.
- **touch:** Change file time stamps.
- **hostname:** Print or set system name.
- **cat:** Concatenate and print (Display) the content of files.
- **chmod:** Change access permissions.
- **echo:** Display the message on screen.
- **grep:** Search files for lines that match a given pattern.
- **fgrep:** Search files for lines that match a fixed string.
- **mv:** Move or Rename files or Directories.
- **cp:** Copy one or more files to another location.
- **more:** Display output one screen at a time.
- **less:** Shows a file's contents one screen at a time.
- **wc:** Print byte, word, and line counts.
- **awk:** Find and replace text, database sort/ validate/ index.
- **sed:** Stream Editor.
- **tail:** Output the last part of file.

Part 2: Answer the following questions (you need to supply commands).

1. How to navigate to specific Directory?

Ans: `cd path/to/directory`.

2. How to see detailed information about files and directories using `ls`?

Ans: `ls -l`.

3. How to create multiple directories in Linux using '`mkdir`' command?

Ans: `mkdir dir1 dir2 dir3`.

4. How to remove multiple files at once with `rm`?

Ans: `rm file1 file2 file3`.

5. Can `rm` be used to delete directories?

Ans: `rm -r directory_name`.

6. How do you copy files and directories in Linux?

Ans: `cp source_file destination_file`, `cp -r source_directory destination_directory`.

7. How to rename a file in Linux Using `mv` command?

Ans: `mv old_filename new_filename`.

8. How to move multiple files in Linux using `mv` command?

Ans: `mv file1 file2 file3 destination_directory`.

9. How to create multiple empty files by using `touch` command in Linux?

Ans: `touch file1 file2 file3`.

10. How to view the content of multiple files in Linux?

Ans: `cat file1 file2`.

11. How to create a file and add content in Linux using '`cat`' command?

Ans: `cat > filename`.

12. How to append the contents of one file to the end of another file using cat command?

Ans: cat source_file >> destination_file.

13. How to use cat command if the file has a lot of content and can't fit in the terminal?

Ans: cat filename | less.

14. How to merge contents of multiple files using 'cat' command?

Ans: cat file1 file2 >merged_file.

15. How to use cat command to append to an existing file?

Ans: cat>>existing_file.

16. What is "chmod 777", "chmod 755" and "chmod +x" or "chmod a+x"?

Ans:

i) chmod 777: Grants read write , and execute permissions to everyone.

ii) chmod 755: Grants full permissions to the owner ,and read and execute permissions to other.

iii) chmod +x or chmod a+x: Adds execute permissions to everyone.

17. How to find the number of lines that matches the given string/pattern?

Ans: grep -c "pattern" filename.

18. How to display the files that contains the given string/pattern?

Ans: grep "pattern"*.

19. How to show the line number of file with the line matched?

Ans: grep -n "pattern"file name.

20. How to match the lines that start with a string using grep?

Ans: grep "^string" filename.

21. Can the 'sort' command be used to sort files in descending order by default?

Ans: sort -r filename.

22. How can i sort a file based on a specific column using the 'sort' command?

Ans: sort -k column_number filename.

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