

# 4ITRC2 Operating System Lab

## Lab Assignment 1

**Aim** :- To Study and understand Ubuntu Commands

**To Perform** :- Execute different Commands

**To Submit** :-

**Part 1** :- Outputs of the following commands

1. pwd :- Print working Directory
2. cd :- Change Directory
3. ls :- List of information about files
4. mkdir :- Create new folder(s)
5. rm :- Remove files
6. touch :- Change File time stamps
7. hostname :- Print or set system name
8. cat :- Concatenate and print (display) the content of files
9. chmod :- change access permissions
10. echo :- Display the message on screen
11. grep :- Search file(s) for lines that match a given pattern
12. fgrep :- Search file(s) for lines that match a fixed string
13. mv :- Move or rename files or directories
14. cp :- Copy one or more files to another location
15. more :- Display output one screen at a time
16. less :- shows a file's contents one screen at a time
17. wc :- Print byte, word, and line counts
18. awk :- Find and Replace text, database sort/validate/index
19. sed :- Stream Editor
20. tail :- Output the last part of file

**Part 2 :-** Answer the following Questions (you need to supply commands)

1.How to navigate to a 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 :-

- chmod 777: Grants read, write, and execute permissions to everyone.
- chmod 755: Grants full permissions to the owner, and read and execute permissions to others.
- 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" filename

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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