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BASIC LINUX COMMANDS

AIM:

To learn about basic linux commands .

INTRODUCTION:

Linux is a powerful, open-source operating system widely used in servers, development environments, and even personal computing. Learning basic Linux commands is essential for anyone working with Linux systems, as it allows users to navigate directories, manage files, control processes, and configure system settings efficiently.

LINUX COMMANDS:

1. **ls** – list directory
   Synopsis: ls [option]… [File]…
   Description: Display files and directories in the current working directory. By default, entries are sorted alphabetically.

2. **touch** – change file / create empty file
   Synopsis: touch [option]… [File]…
   Description: Shows detailed information for each file including permissions, owner, size, and time.

3. **cat** – concatenate and display file contents
   Synopsis: cat [option]… [file]
   Description: Prints the contents of one or more files to standard output. Useful for viewing or combining files.

6. **mkdir** – make directories
   Synopsis: mkdir [option]… Directory
   Description: Creates a new directory. Use -p to create parent directories as needed.

7. **ls -a** – list all files including hidden
   Synopsis: ls -a
   Description: Lists all files, including hidden ones, inside the open directory.

8. **nano** – text editor
   Synopsis: nano [file]
   Description: Launches a user-friendly text editor in the terminal to edit files.

9. **rm** – remove files
   Synopsis: rm [option]… File…
   Description: Deletes files or directories. Use -r for recursive removal, -f to force without prompt.

10. **rmdir** – remove empty directories
    Synopsis: rmdir (directory)
    Description: Deletes a directory only if it is empty.

11. **ps -e** – list all running processes
    Synopsis: ps -e
    Description: Shows currently running processes in the system.

12. **grep** – search for text patterns inside files or output
    Synopsis: grep "word" file.txt
    Description: Filters process list to show only those matching the given name or keyword.

13. **echo** – display text, variables or messages
    Synopsis: echo [string]
    Description: Prints the given text to the terminal. Often used in scripting.

14. **top** – real-time process viewer
    Synopsis: top
    Description: Displays a dynamic list of running processes along with CPU and memory usage.

15. **free** – display memory message
    Synopsis: free [option]
    Description: Shows the amount of free and used memory in the system. Use -h for human-readable output.

16. **vmstat** – report system performance
    Synopsis: vmstat [delay] [count]

Description: Sends ICMP echo requests to a network host to check if it's reachable.

19. **ifconfig** – view network interfaces
Synopsis: ifconfig
Description: Displays or configures network interface parameters (now largely replaced by ip addr).

20. **vi** – text editor
Synopsis: vi [file]
Description: Opens the vi editor to create or modify files; offers powerful editing features.

21. **cd** – change directory
Synopsis: cd [directory]
Description: Changes the current working directory.

22. **pwd** – print working directory
Synopsis: pwd
Description: Shows current location.

OUTPUT:

WINDOWS COMMANDS:

1. **dir** - Equivalent of ls
Synopsis: dir [path] [[options]]
Description: List all files and directories

4. **echo** - Prints
   Synopsis: echo [message]
   Description: Displays messages, useful in batch scripts.

5. **dir -a** (like ls -a)
   Synopsis: dir -a [path]
   Description: Lists files and directories.

6. **mkdir** - make directory
   Synopsis: mkdir [drive:] [path] foldername
   Description: Create a new directory in a specified path.

7. **del** - delete file (remdir)
   Synopsis: del file.txt
   Description: Delete files or directories from the file system.

8. **tasklist** - display all currently running process
   Synopsis: tasklist [options]
   Description: Lists process name, PID (Process ID), session name/ID, and memory usage.

9. **find** - search for a specific string of text within files
   Synopsis: find "string" [filename]
   Description: Looks for the given "string" inside the specified file.

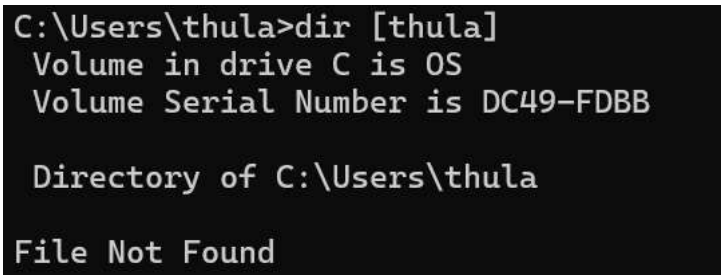
10. **systeminfo** - detailed system configuration information
    Synopsis: systeminfo
    Description: Often used for system audits and troubleshooting.

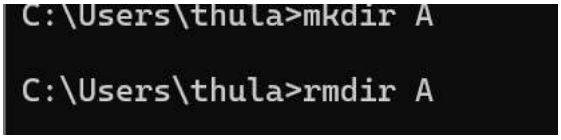
11. **typeperf** - display or log performance counter data
    Synopsis: typeperf [counter...] [options]
    Description: Can display output in the console or save it to a log file (CSV, TSV, binary).

12. **tracert** - Trace the path packets take to reach
    Synopsis: tracert [options] <hostname or IP>
    Description: Displays each router packets travel through until reaching the destination.

13. **ping** - network connectivity
    Synopsis: ping [option] <hostname or IP>
    Description: Displays packet loss, response time, and TTL (Time to Live).

14. **ipconfig** - displays and manages IP address
    Synopsis: ipconfig [options]





RESULT:

Thus,the basic linux and windows commands have been performed successfully.