



Bash Commands – `ls` & Basic File Operations



`ls` – List Files and Directories

- `ls`
List files and directories in the current directory.
- `ls -l`
Show detailed file information (permissions, owner, size, date).
- `ls -a`
Show hidden files (files starting with `.`).
- `ls -la`
Show detailed list including hidden files.
- `ls -R`
List files recursively (including sub-directories).
- `ls -Ra`
List all files (including hidden) recursively.
- `ls -t`
Sort files by last modified time.
- `ls -lt`
Detailed list sorted by modified time.
- `ls -lr`
List files in reverse order.
- `ls -ls`
Show file size in blocks.



Listing Specific Files

- `ls *.json`
Show only `.json` files.
- `ls src*`
Show all files/folders starting with `src`.
- `ls ..`
Show files from the parent directory.
- `ls -lR | grep .json`
Find all `.json` files recursively.

File Commands

- `cat filename`
Display file content.
 - `cat > filename`
Create or overwrite file content (Ctrl + D to save).
 - `cat >> filename`
Append data to a file.
 - `touch filename`
Create a new empty file.
 - `echo "hello world"`
Print text to terminal.
 - `echo "hello world" > file.txt`
Write text to a file.
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Directory Commands

- `mkdir dirname`
Create a new directory.
 - `mkdir test && cd test`
Create a directory and navigate into it.
 - `mkdir -p frontend/src`
Create nested directories.
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File Operations

- `mv script.js runtime-script.js`
Rename a file.
- `mv file.txt /destination/path/`
Move a file.
- `cp filename destination`
Copy a file.
- `cp -r folder destination`
Copy a directory recursively.
- `rm filename`
Delete a file.

- `rm -r foldername`
Delete a directory.
 - `rm -rf foldername` ⚠
Force delete (use carefully).
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Permission Commands (`chmod`)

- `chmod u-x filename`
Remove execute permission from the owner.
 - `chmod 777 filename`
Give read, write, execute permission to everyone (unsafe).
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File Viewing Commands

- `head newFile.txt`
Show first 10 lines of a file.
 - `head -20 newFile.txt`
Show first 20 lines.
 - `tail newFile.txt`
Show last 10 lines.
 - `tail -n 4 newFile.txt`
Show last 4 lines.
 - `tail -n +25 newFile.txt | head -20`
Show lines 25 to 44 from the file.
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Search Commands (`grep`)

- `grep 'one' newFile.txt`
Search for the word `one`.
 - `grep -i 'one' newFile.txt`
Case-insensitive search.
 - `grep -h 'one' newFile.txt`
Hide filename in output.
 - `grep -r 'one' .`
Search recursively in current directory.
 - `grep -hir 'one' .`
Recursive, case-insensitive search without filenames.
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- `grep -o 'one' newFile.txt`
Print only matched words.
 - `grep -w 'one' newFile.txt`
Match whole word only.
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File Info Commands

- `wc newFile.txt`
Show line, word, and character count.
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Editor Command

- `vi newFile.txt`
Open file in Vim editor.
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History Command

- `history`
Show previously executed commands.
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Quick Summary

- `ls` → List files
- `cat` → Read/write files
- `touch` → Create files
- `mkdir` → Create folders
- `mv` → Move/rename
- `cp` → Copy
- `rm` → Delete
- `chmod` → Change permissions
- `grep` → Search text
- `head/tail` → View file parts