

Here's a detailed tutorial on basic terminal commands that work on Linux, macOS, and Git Bash (Windows). These commands are essential for navigating and managing files from the terminal, especially for coding and version control (e.g., Git, VS Code, etc.).

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1. Navigation Commands

pwd - Print Working Directory

Shows the current location in the filesystem.

pwd

★ Output example:

/Users/yourname/projects

, oser s, your name, projects

vboxuser@ubuntu1:~/Desktop\$ pwd
/home/vboxuser/Desktop

1s - List Directory Contents

Lists files and folders in the current directory.

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    1s
      1s -1 → Detailed list (permissions, size, date)
      1s -a \rightarrow Shows hidden files (those starting with .)
     ls -la → Combined
  vboxuser@ubuntu1:-/Desktop$ ls
          hello.c parent folder
  hello
  cd – Change Directory
  Moves into a directory.
                                                                             ſĊ
    cd folder_name
Eu.
     ្រ main ▼
                 unit_1 / basic / basic.md
                                                                               ↑ Top
                                                            Raw 🖵 🕹
                                                        83
Preview
          Code
                 Blame
                                                                             Q
    cd Documents
                      # Go to Documents
    cd ..
                      # Go up one level
    cd /
                      # Go to root
    cd ~
                      # Go to home directory
  2. File and Directory Management
  mkdir - Make Directory
  Creates a new folder.
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   mkdir new_folder
  vboxuser@ubuntu1:~/Desktop/parent_folder$ mkdir newfolder
```

Creates an empty file.

touch file.txt

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vboxuser@ubuntu1:~/Desktop/parent_folder\$ touch file.txt

cp - Copy Files or Directories

cp source.txt destination.txt



vboxuser@ubuntu1:~/Desktop/parent_folder\$ cp file.txt file2.txt

• Copy folder:

cp -r folder1 folder2



vboxuser@ubuntu1:~/Desktop/parent_folder\$ mkdir folder2 vboxuser@ubuntu1:~/Desktop/parent_folder\$ cp -r newfolder folder2

my - Move or Rename Files

mv oldname.txt newname.txt



mv file.txt ~/Documents/ # Move file



rm - Remove Files

rm file.txt # Delete file rm -r folder name # Delete folder (recursively)



vboxuser@ubuntu1:~/Desktop/parent_folder\$ rm file.txt



Be careful! There is no undo.



3. File Viewing & Editing

cat - View File Contents

Displays content in terminal.

cat file.txt



nano – Edit Files in Terminal

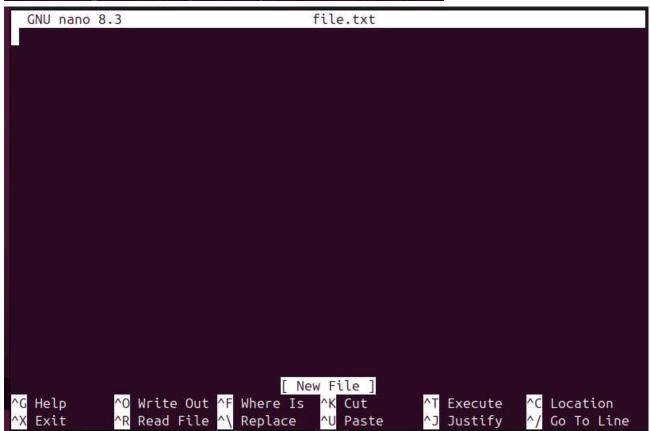
A basic terminal-based text editor.

nano file.txt



- Use arrows to move
- CTRL + 0 to save
- CTRL + X to exit

\$ nano file.txt



clear - Clears the Terminal

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Shortcut: CTRL + L

vboxuser@ubuntu1:~/Desktop/parent_folder\$



4. System Commands

echo - Print Text

Useful for debugging or scripting.

echo "Hello, World!"

vboxuser@ubuntu1:~/Desktop/parent_folder\$ echo "hello world"
hello world

whoami - Show Current User

whoami

vboxuser@ubuntu1:-/Desktop/parent_folder\$ whoami
vboxuser

man - Manual for Any Command

man 1s

Use q to quit the manual.

5. Searching and Finding

find - Locate Files

find . -name "*.txt"

Finds all .txt files in current folder and subfolders.

alt text

grep - Search Inside Files

grep "hello" file.txt

Searches for the word hello inside file.txt.



6. Helpful Shortcuts

Shortcut	Action
Tab	Auto-complete files/folders
↑ / ↓	Browse command history
CTRL + C	Stop a running command
CTRL + L	Clear screen

7. Bonus: Chaining Commands

• Run multiple commands:

mkdir test && cd test && touch hello.txt



- Run only if previous command succeeds: &&
- Run regardless of success: ;