HOW SOFTWARE WORKS · BEGINNER · 12 MIN READ

Terminal basics: the command line without fear

What the terminal is, the ten commands you'll meet when building with AI, how to read errors, and the commands to never run blindly.

Pass the check (4 of 5) online to earn the “Command Line Ready” badge:
https://digitalbuilders757.com/university/study/terminal-basics

What the terminal is

The terminal (or command line) is a text way to tell your computer what to do. Coding agents like Claude Code, tools like npm and Git, and dev servers all run there. On a Mac it's the Terminal app, on Windows it's Windows Terminal or PowerShell, and editors like VS Code and Cursor have one built in.

Ten commands you'll meet

- pwd shows which folder you're in (your working directory); ls lists what's in it (dir on Windows Command Prompt).
- cd my-app moves into a folder; cd .. goes up one level.
- mkdir new-folder makes a folder.
- npm install downloads the packages a project needs; npm run dev starts it on localhost.
- git status shows what changed; git add and git commit save a snapshot.
- Ctrl+C stops a running program; the up arrow repeats your last command.

Reading what comes back

The most useful line is usually near the bottom. 'command not found' means a typo or a tool that isn't installed; 'permission denied' means you're not allowed to touch that file or folder; 'no such file or directory' means you're in the wrong folder (check with pwd). Copy the whole error, not just the last line, when you ask an AI for help.

Never run what you don't understand

Commands can delete files or install anything. Be very careful with sudo (runs as an administrator), rm -rf (deletes without asking) and anything that pipes a downloaded script straight into your shell (curl ... | sh). Don't paste commands from strangers. When a coding agent asks permission to run a command, read it first and ask it to explain if you're unsure. Keep secrets in environment files, not typed into commands.

Key terms

Terminal (command line)
A text window where you run commands like npm install.

Working directory
The folder your terminal is in right now. pwd shows it; cd changes it.

npm / package
npm is the registry of reusable JavaScript code; each reusable piece is a package.

Localhost
Your own computer acting as the server while you build, e.g. localhost:3000.

Git
Free software that tracks every change to a folder of code.

Commit
A saved snapshot of changes with a message.

Coding agent
An AI that reads, edits and runs code across a whole project.

Environment variable
A setting or secret the app reads at run time, kept outside the code.

Try it: Ten minutes in the terminal

1. Open the terminal in VS Code, Cursor or your computer.
2. Run pwd, then ls (or dir), then cd into a folder and back out with cd ..
3. Make a practice folder with mkdir, move into it and check where you are with pwd.
4. Ask an AI to explain one command a coding agent ran for you, line by line.

KNOWLEDGE CHECK

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5 questions. Circle one answer for each; 4 or more correct passes. Answers are at the back.

1. What does cd .. do?

A. Moves you up one folder
B. Deletes the folder
C. Lists the files in the folder above
D. Closes the terminal

2. Your dev server is running and you want to stop it. What do you press?

A. Ctrl+Z then Enter
B. Ctrl+C
C. Delete
D. The up arrow

3. The terminal says 'no such file or directory'. A good first check?

A. Restart the terminal
B. Run the command with sudo
C. Run pwd and ls to see which folder you're in and what's there
D. Delete the project

4. A forum post says to fix your problem with sudo rm -rf followed by a path. What do you do?

A. Run it, since the post has lots of upvotes and thank-you replies
B. Run it twice to be sure
C. Run it without sudo first, then with sudo if it doesn't work
D. Don't run it until you know exactly what it deletes

5. A coding agent asks permission to run a command you don't recognise. Best move?

A. Read it and ask the agent to explain what it does before approving
B. Always approve, since the agent only suggests commands that are safe
C. Close the editor
D. Copy it into a public chat

Official sites

Apple: Terminal User Guide: https://support.apple.com/guide/terminal/welcome/mac
Microsoft: Windows Terminal: https://learn.microsoft.com/en-us/windows/terminal/
VS Code: Terminal basics: https://code.visualstudio.com/docs/terminal/basics

Last reviewed 2026-11-25. AI tools change fast; check each tool's own site for current features, plans and prices.

ANSWER KEY

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1. A: Moves you up one folder
cd changes directory; .. means the parent folder.

2. B: Ctrl+C
Ctrl+C interrupts the running program in that terminal.

3. C: Run pwd and ls to see which folder you're in and what's there
Most often you're just in the wrong folder.

4. D: Don't run it until you know exactly what it deletes
That combination deletes files with administrator rights and no undo.

5. A: Read it and ask the agent to explain what it does before approving
Approving is your safety check. Understand it first.