Git Command Cheat Sheet

Quick branch check: git status | git branch (*) | git rev-parse --abbrev-ref HEAD

Command	Purpose	Notes / Example Output
git config --global user.name "Name"	Set global username	Used for commit author info
git config --global user.email "Email"	Set global email	Should match GitHub account
git config --global init.defaultBranch main	Change default branch to main	Set once
git init	Initialize local repository	Creates .git folder
git clone <URL>	Clone from remote repository	Default folder = repo name
git status	Check status and branch	On branch main
git add <file>	Stage changes	git add . = stage all
git commit -m "message"	Commit staged changes	Use meaningful messages
git log --oneline --graph	Show concise commit history	Includes branch graph
git branch	List local branches	* marks current branch
git switch <branch>	Switch branches (new syntax)	Same as checkout
git switch -c <branch>	Create and switch to new branch	Same as checkout -b
git remote -v	List remote repositories	Shows fetch/push URLs
git remote add origin <URL>	Add remote	Common name is origin
git remote set-url origin <URL>	Change remote URL	Switch HTTPS/SSH
git fetch	Fetch remote updates (no merge)	Updates origin/* refs
git pull	Fetch and merge updates	Equivalent to fetch + merge
git pull --rebase origin <branch>	Fetch and reapply commits	Avoids extra merge commits
git push -u origin <branch>	Push and set tracking	Needed for first push
git push	Push to tracked remote branch	Requires tracking branch
git restore <file>	Discard local changes	Only for tracked files
git restore --staged <file>	Unstage file	Keep working directory changes
git reset --hard HEAD~1	Reset to previous commit	Dangerous: loses changes
git revert <commit>	Revert commit with new commit	Safe: keeps history

nothing added to commit but untracked files present → Run: git add then git commit
rejected / non-fast-forward → Sync first: git pull --rebase origin , then git push
error: src refspec does not match any → Branch has no commits; commit at least once first