

## Basics

Command	Description	Example
git init	Create a new Git repository.	git init
git clone <url>	Download a repository.	git clone https://github.com/user/repo.git
git status	Show working directory state.	git status
git add <file>	Stage a file.	git add index.html
git add .	Stage all files.	git add .
git commit -m "msg"	Save staged changes.	git commit -m "Initial commit"
git commit -am "msg"	Add & commit tracked files.	git commit -am "Fix bug"

## Branching & Merging

Command	Description	Example
git branch	List branches.	git branch
git branch <name>	Create new branch.	git branch feature/login
git checkout <branch>	Switch branch.	git checkout dev
git switch <branch>	Better way to switch.	git switch main
git merge <branch>	Merge into current branch.	git merge feature/login
git rebase <branch>	Reapply commits onto another.	git rebase main
git branch -d <branch>	Delete branch.	git branch -d old-branch

## Remote Repositories

Command	Description	Example
git remote -v	Show remotes.	git remote -v
git remote add <name> <url>	Add remote.	git remote add origin <url>
git push	Push commits.	git push origin main
git pull	Fetch & merge.	git pull origin main
git fetch	Download changes.	git fetch origin
git push -u origin <branch>	Push & track branch.	git push -u origin dev

## Viewing & Comparing

Command	Description	Example
git log	View commit history.	git log
git log --oneline	Simple history.	git log --oneline
git diff	Show changes.	git diff
git diff <file>	Compare file before commit.	git diff index.html
git show <hash>	Show specific commit.	git show a1b2c3

## Undoing Changes

Command	Description	Example
git restore <file>	Restore file.	git restore index.html
git checkout -- <file>	Old restore syntax.	git checkout -- index.html
git reset <file>	Unstage file.	git reset index.html
git reset --soft HEAD~1	Undo commit keep changes.	git reset --soft HEAD~1
git reset --hard HEAD~1	Undo commit & changes.	git reset --hard HEAD~1
git revert <hash>	Revert commit safely.	git revert a1b2c3

## Stashing

Command	Description	Example
git stash	Store changes temporarily.	git stash
git stash pop	Restore last stash.	git stash pop
git stash list	Show stashes.	git stash list
git stash apply <id>	Apply specific stash.	git stash apply stash@{1}
git stash clear	Delete stashes.	git stash clear

## Advanced

Command	Description	Example
git tag	List tags.	git tag
git tag <name>	Create lightweight tag.	git tag v1.0
git tag -a <name> -m "msg"	Annotated tag.	git tag -a v1.0 -m "Release"
git cherry-pick <hash>	Apply a commit.	git cherry-pick a1b2c3
git bisect	Find bug via binary search.	git bisect start
git clean -f	Remove untracked files.	git clean -f
git archive	Create archive from repo.	git archive --format zip HEAD > repo.zip