Git Commands Cheat Sheet (With Definitions & Examples)

Git Command Definitions

git init: Initializes a new Git repository in the current directory.

git clone: Creates a local copy of a remote repository.

git status: Displays the state of the working directory and staging area.

git add: Adds files to the staging area (prepares them for commit).

git commit: Saves staged changes to the local repository history.

git log: Shows the commit history for the repository.

git branch: Lists, creates, or deletes branches.

git checkout: Switches branches or restores files.

git merge: Combines changes from another branch into the current branch.

git fetch: Downloads changes from the remote repository without merging.

git pull: Fetches and merges changes from the remote repository into the current branch.

git push: Uploads local branch commits to the remote repository.

git reset: Unstages files or resets commits.

git stash: Temporarily saves changes not ready to commit.

git tag: Marks specific commits as releases or important points.

git diff: Shows file differences between commits, branches, or working states.

Git Commands with Examples

Command Purpose	Git Command	Example
Initialize Repository	git init	git init
Clone Repository	git clone <url>	git clone https://github.com/user/repo.git
Check Status	git status	git status
Add Files	git add filename.txt | git add .	git add index.html
Commit Changes	git commit -m 'message'	git commit -m 'Added login feature'
View History	git log	git log --oneline
Create Branch	git branch feature-name	git branch feature/login
Switch Branch	git checkout feature-name	git checkout feature/login
Create & Switch Branch	git checkout -b feature-name	git checkout -b bugfix/ui-issue
Merge Branch	git merge feature-name	git merge feature/login
Delete Branch	git branch -d feature-name	git branch -d bugfix/ui-issue
Check Remotes	git remote -v	git remote -v
Fetch Changes	git fetch origin	git fetch origin main
Pull Changes	git pull origin main	git pull origin main
Push Changes	git push origin main	git push origin feature/login
Unstage File	git reset filename.txt	git reset index.html
Discard Changes	git checkout -- filename.txt	git checkout -- index.html
Reset to Commit	git reset --hard <commit-id>	git reset --hard a1b2c3d
Stash Changes	git stash	git stash save 'temp work'
Apply Stash	git stash pop	git stash pop
Create Tag	git tag v1.0	git tag -a v1.0 -m 'Release v1.0'
Push Tags	git push origin --tags	git push origin --tags
Show Diff	git diff	git diff HEAD~1 HEAD
Show Last Commit	git show HEAD	git show HEAD