

# Git Command Cheatsheet

## Git Basics

Command	Description
git init	Initialize a new local Git repository
git clone <repo_url>	Copy a remote repository to your computer
git status	Check current status
git add .	Stage all changes
git add <file>	Stage specific file
git commit -m 'msg'	Commit staged changes
git log	View commit history
git diff	Show unstaged changes
git diff --staged	Show staged changes

## Branching

Command	Description
git branch	List branches
git branch <name>	Create branch
git checkout <name>	Switch branch
git switch <name>	Switch branch (new syntax)
git merge <name>	Merge branch into current
git branch -d <name>	Delete branch

## Remote Repositories

Command	Description
git remote add origin <url>	Link repo to GitHub
git remote -v	Show linked remotes
git push -u origin main	Push commits to GitHub (first time)
git push	Push updates
git pull	Fetch and merge updates
git fetch	Fetch without merging

## Undoing & Fixing

Command	Description
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<code>git restore &lt;file&gt;</code>	Undo changes since last commit
<code>git restore --staged &lt;file&gt;</code>	Unstage file
<code>git reset --hard</code>	Reset all changes (■ irreversible)
<code>git reset --hard &lt;commit&gt;</code>	Reset to specific commit
<code>git revert &lt;commit&gt;</code>	Undo commit safely

## Shortcuts

Command	Description
<code>git config --global user.name 'Kelvin'</code>	Set username
<code>git config --global user.email 'you@example.com'</code>	Set email
<code>git log --oneline</code>	Compact history
<code>git show &lt;commit&gt;</code>	Show commit details
<code>git stash</code>	Temporarily save uncommitted changes
<code>git stash pop</code>	Reapply stashed changes

## GitHub Authentication

Command	Description
1. Generate Token	<a href="https://github.com/settings/tokens">https://github.com/settings/tokens</a>
2. Use in terminal	Username: <your GitHub username> Password: <paste token here>