



# Git Commands Cheat Sheet

## A Quick Reference Guide to Essential Git Commands

---

### 1. Basic Git Commands 🎨

Command	Description
<code>git init</code>	<i>Initializes a new Git repository.</i>
<code>git clone &lt;repo-url&gt;</code>	<i>Creates a local copy of a remote repository.</i>
<code>git add &lt;file&gt;</code>	<i>Stages changes in the specified file for commit.</i>
<code>git commit -m "message"</code>	<i>Records staged changes with a message.</i>
<code>git status</code>	<i>Shows the status of changes in your working directory.</i>
<code>git log</code>	<i>Displays the commit history.</i>
<code>git diff</code>	<i>Shows changes between files.</i>
<code>git show &lt;commit&gt;</code>	<i>Displays details about a specific commit.</i>

---

### 2. Branching and Merging 🌿

Command	Description
<code>git branch</code>	<i>Lists all branches.</i>
<code>git branch &lt;branch-name&gt;</code>	<i>Creates a new branch.</i>
<code>git switch &lt;branch-name&gt;</code>	<i>Switches to a specific branch.</i>
<code>git checkout &lt;branch-name&gt;</code>	<i>Switches to a branch or restores files.</i>

Command	Description
<code>git merge &lt;branch-name&gt;</code>	<i>Merges the specified branch into the current branch.</i>
<code>git rebase &lt;branch-name&gt;</code>	<i>Reapplies commits from one branch onto another.</i>

---

### 3. Remote Repositories 🌐

Command	Description
<code>git remote add &lt;name&gt; &lt;url&gt;</code>	<i>Adds a new remote repository.</i>
<code>git fetch &lt;remote&gt;</code>	<i>Downloads changes without merging.</i>
<code>git pull &lt;remote&gt;</code>	<i>Fetches and merges changes into the current branch.</i>
<code>git push &lt;remote&gt; &lt;branch&gt;</code>	<i>Uploads local commits to a remote branch.</i>

---

### 4. Stashing and Cleaning 📁

Command	Description
<code>git stash</code>	<i>Temporarily saves uncommitted changes.</i>
<code>git stash apply</code>	<i>Reapplies the most recent stash.</i>
<code>git stash pop</code>	<i>Applies and removes the most recent stash.</i>
<code>git clean -f</code>	<i>Removes untracked files from the working directory.</i>

---

## 5. Viewing and Comparing

Command	Description
<code>git diff &lt;branch1&gt; &lt;branch2&gt;</code>	<i>Shows differences between two branches.</i>
<code>git log --oneline --graph</code>	<i>Displays the commit history in a compact format.</i>
<code>git blame &lt;file&gt;</code>	<i>Shows who last modified each line of a file.</i>

---

## 6. Undoing Changes

Command	Description
<code>git reset &lt;file&gt;</code>	<i>Unstages a file but keeps changes.</i>
<code>git reset --soft &lt;commit&gt;</code>	<i>Moves the HEAD to a previous commit, keeping changes.</i>
<code>git reset --hard &lt;commit&gt;</code>	<i>Moves the HEAD and discards staged changes.</i>
<code>git revert &lt;commit&gt;</code>	<i>Creates a new commit to undo a previous commit.</i>

---