Git Command Cheat Sheet

# 1. Initial Setup

Before starting with Git, you need to configure your identity (name and email):

Set your name:

git config --global user.name "Your Name"

Set your email:

git config --global user.email "you@example.com"

# 2. Creating a Repository

Initialize a new Git repository in your current directory:

git init

Clone an existing remote repository:

git clone <repository-url>

# 3. Working with Files

Check the status of your working directory and staging area:

git status

Track a specific file or changes in the working directory:

git add <file>

Add all files to the staging area:

git add .

# 4. Committing Changes

Commit the staged changes with a message:

git commit -m "Commit message here"

Commit all tracked changes (bypassing the staging area):

git commit -a -m "Commit message here"

# 5. Branching and Merging

Create a new branch:

git branch <branch-name>

Switch to another branch:

git checkout <branch-name>

Create and switch to a new branch in one command:

git checkout -b <branch-name>

Merge a branch into the current branch:

git merge <branch-name>

# 6. Working with Remote Repositories

Add a remote repository:

git remote add origin <remote-repository-url>

View remote URLs:

git remote -v

Push changes to the remote repository:

git push origin <branch-name>

Pull the latest changes from the remote repository:

git pull origin <branch-name>

# 7. Stashing Changes

Save your changes temporarily (stash them):

git stash

Apply the last stashed changes:

git stash apply

# 8. Viewing Commit History

View the commit history:

git log

View commit history in a simplified format:

git log --oneline

# 9. Undoing Changes

Unstage a file while retaining its changes:

git reset <file>

Revert changes in the working directory to the last commit:

git checkout -- <file>

Undo the last commit but keep the changes:

git reset --soft HEAD~1

# 10. Tagging Releases

Create a new tag for a specific commit:

git tag <tag-name>

Push a tag to the remote repository:

git push origin <tag-name>