Essential Git Commands with Descriptions

## git init

Initialize a new Git repository in the current directory.

## git clone <repo\_url>

Create a local copy of a remote repository.

## git status

Show the status of changes as untracked, modified, or staged.

## git add <file>

Add a file to the staging area.

## git add .

Stage all changed files in the current directory and its subdirectories.

## git commit -m "message"

Commit the staged snapshot with a descriptive message.

## git log

View the commit history.

## git diff

Show changes between working directory and staging area.

## git branch

List, create, or delete branches.

## git branch <branch\_name>

Create a new branch.

## git checkout <branch\_name>

Switch to another branch.

## git checkout -b <branch\_name>

Create and switch to a new branch.

## git merge <branch\_name>

Merge the specified branch’s history into the current branch.

## git pull

Fetch from a remote repository and merge the changes into the current branch.

## git push

Upload local branch commits to the remote repository.

## git push -u origin <branch\_name>

Push a branch to the remote repository and set upstream tracking.

## git remote -v

Show the remote repositories linked to your project.

## git fetch

Download objects and refs from another repository.

## git reset <file>

Unstage a file while retaining the changes in the working directory.

## git rm <file>

Remove a file from the working directory and the staging area.

## git stash

Temporarily save changes that are not ready to be committed.

## git stash pop

Apply the last stashed changes and remove them from the stash list.

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

Set the global Git username.

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

Set the global Git email address.