Basic Git Commands

Setup

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

  Set your name for commits.

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

  Set your email for commits.

- git init

  Initialize a new Git repository.

Repository Management

- git clone <repository_url>

  Clone a repository to your local machine.

- git status

  Check the status of your working directory.

- git log

  View commit history.

Adding and Committing Changes

- git add <file>

  Stage a specific file for commit.

- git add .

  Stage all changes in the current directory.

- git commit -m "Your commit message"

  Commit staged changes with a message.

Branching

- **git branch**

  List all branches.

- **git branch <branch_name>**

  Create a new branch.

- **git checkout <branch_name>**

  Switch to a specific branch.

- **git checkout -b <branch_name>**

  Create and switch to a new branch.

Merging and Rebasing

- **git merge <branch_name>**

  Merge a branch into the current branch.

- **git rebase <branch_name>**

  Rebase the current branch onto another branch.

Pushing and Pulling

- **git push origin <branch_name>**

  Push changes to a remote branch.

- **git pull**

  Fetch and merge changes from the remote repository.

Undoing Changes

- **git reset <file>**

  Unstage a file.

- **git checkout -- <file>**

  Discard changes in a file.

- **git revert <commit_hash>**

  Revert a specific commit.

Tagging

- **git tag <tag_name>**

  Create a tag.

- **git push origin <tag_name>**

  Push a tag to the remote repository.

Viewing Changes

- **git diff**

  Show changes in the working directory.

- **git diff <branch_name>**

  Show differences between branches.