

Git Commands and Their Options

1. git init

Initializes a new Git repository in the current directory.

Options:

--bare: Creates a bare repository (for sharing, no working directory).

2. git clone <url>

Copies a remote repository to your local machine.

Options:

--branch <branch> or -b: Clone a specific branch.

--depth <number>: Perform a shallow clone with limited history.

3. git add <file>

Stages changes to be committed.

Options:

-p or --patch: Add changes interactively.

-A or --all: Add all changes (tracked and untracked).

4. git commit

Saves staged changes to the repository.

Options:

-m "<message>": Adds a commit message inline.

--amend: Modify the last commit.

5. git status

Shows the status of your working directory and staging area.

Options:

-s or --short: Displays a compact summary.

--ignored: Lists ignored files.

6. git log

Displays the commit history.

Options:

--oneline: Shows each commit on one line.

--graph: Displays a visual graph of commits.

--since=<date>: Shows commits since a specific date.

7. git diff

Shows the differences between commits, branches, or the working directory.

Options:

--staged: Show changes that have been staged.

--color: Highlights changes in color.

8. git branch

Manages branches in the repository.

Options:

-d <branch>: Deletes a branch.

-r: Lists remote branches.

-m <old> <new>: Renames a branch.

9. git checkout

Switches branches or restores files.

Options:

-b <branch>: Creates and switches to a new branch.

<file>: Restores a file from the index.

10. git pull

Fetches and merges changes from the remote repository.

Options:

--rebase: Re-applies your changes on top of the fetched changes.

11. git push

Sends your local commits to the remote repository.

Options:

--force: Forces the push (overwrites remote changes).

--tags: Pushes all tags.

12. git remote

Manages remote repositories.

Options:

add <name> <url>: Adds a remote.

remove <name>: Removes a remote.

13. git merge

Combines changes from another branch into the current branch.

Options:

--no-ff: Creates a merge commit even for fast-forward merges.

--abort: Stops the merge and resets to the previous state.

14. git rebase

Re-applies commits on top of another base tip.

Options:

--interactive or -i: Allows editing commits during the rebase.

15. git stash

Temporarily saves changes not ready to commit.

Options:

list: Lists all stashes.

pop: Applies the most recent stash and removes it.

16. git tag

Creates a tag for marking specific commits.

Options:

-a <tag>: Creates an annotated tag.

-d <tag>: Deletes a tag.

17. git reset

Unstages or removes changes.

Options:

--soft: Resets the commit but keeps changes staged.

--hard: Removes all changes and resets the working directory.

18. git config

Configures Git settings.

Options:

--global: Applies the configuration globally.

--list: Lists all configuration settings.