* **Git**

$git is version control tool.

It will track the changes

Following are the $git commands:

Here are some commonly used $git commands with one-line explanations and examples:

1. **Initialize a repository**

*$ git init*

Creates a new git repository in the current directory.

1. **Clone a repository**

*$ git clone https://github.com/user/repo.git*

*Copies a remote repository to your local machine.*

1. **Check the repository status**

*$ git status*

*Shows the status of changes as untracked, modified, or staged.*

1. **Add files to staging**

*$ git add filename*

*Stages changes for the next commit.*

1. **Commit changes**

*$ git commit -m "Initial commit"*

*Saves the staged changes with a commit message.*

1. **View commit history**

*$ git log --oneline*

*Displays a compact commit history.*

1. **View changes before committing**

*$ git diff*

*Shows the differences between the working directory and the staging area.*

1. **Create a new branch**

*$ git branch new-feature*

*Creates a new branch named new-feature.*

1. **Switch to a branch**

*$ git checkout new-feature*

*Switches to the new-feature branch.*

1. **Create and switch to a new branch**

*$ git checkout -b new-feature*

*Creates and switches to new-feature branch in one step.*

1. **Merge a branch into the current branch**

*$ git merge new-feature*

*Merges the new-feature branch into the current branch.*

1. **Delete a branch**

$ git branch -d new-feature

*Deletes the new-feature branch.*

1. **Push changes to a remote repository**

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$$git push origin main

*Pushes the main branch to the remote repository.*

1. **Pull changes from a remote repository**

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$$git pull origin main

*Fetches and merges changes from the remote main branch.*

1. **Revert a commit**

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$$git revert <commit-hash>

*Creates a new commit that undoes the changes of a specific commit.*

1. **Reset to a previous commit (soft reset)**

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$git reset --soft <commit-hash>

*Moves the HEAD to a specific commit, keeping changes staged.*

1. **Reset to a previous commit (hard reset)**

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$git reset --hard <commit-hash>

*Moves the HEAD to a specific commit and deletes all changes after it.*

1. **Stash changes (save without committing)**

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$git stash

*Temporarily saves uncommitted changes.*

1. **Apply stashed changes**

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$git stash pop

*Restores the most recent stashed changes and removes them from the stash list.*

1. **Show remote repositories**

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$git remote -v

*Lists the remote repositories configured for the project.*

1. **Set up a new remote repository**

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$git remote add origin https://github.com/user/repo.git

*Links the local repository to a remote repository.*

1. **Remove a remote repository**

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$git remote remove origin

*Deletes the remote repository reference.*

1. **Rebase a branch**

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$gitrebase main

*Reapplies commits on top of another base commit (useful for keeping history clean).*

1. **Cherry-pick a commit**

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$gitcherry-pick <commit-hash>

*Applies a specific commit from one branch to another.*

1. **Show commit details**

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$$git show <commit-hash>

*Displays detailed information about a specific commit.*