

Git Stash:

- **Concept:** Temporarily save changes that are not ready to be committed, allowing you to switch branches or work on something else without losing your progress.
- **Usage:** `git stash`, `git stash pop`, and `git stash list`.
- **Examples:** Stashing changes before pulling the latest updates from the main branch.

Git Reset:

- **Concept:** Undo changes by moving the branch pointer to a previous commit, effectively rewriting history.
- **Usage:** `git reset --soft`, `git reset --mixed`, and `git reset --hard`.
- **Examples:** Rolling back to a previous commit while keeping or discarding changes.

Git Rebase:

- **Concept:** Reapply commits from one branch onto another, making the history linear and easier to read.
- **Usage:** `git rebase`, `git rebase --interactive`.
- **Examples:** Rewriting commit history to maintain a clean project timeline.

More Advanced Git Techniques:

- **Cherry-Picking:** Apply specific commits from one branch onto another (`git cherry-pick`).
- **Interactive Rebase:** Squash, edit, or reorder commits during a rebase.
- **Merge vs. Rebase:** When to merge and when to rebase to maintain a clear and concise commit history.
- **Git Hooks:** Automating tasks during various stages of the Git workflow.
- **Conflict Resolution:** Efficiently resolving merge conflicts that arise during complex merges or rebases.