| **Task** | **Command** | **Description** |
| --- | --- | --- |
| Initialize a new Git repository | **git init** | Initializes a new Git repository in the current directory. |
| Clone a repository | **git clone <repository\_url>** | Copies a repository from GitHub to your local machine. |
| Check the status of changes | **git status** | Shows the status of changes as untracked, modified, or staged. |
| Stage changes | **git add <file>** | Adds changes to the staging area in preparation for a commit. |
| Unstage changes | **git reset <file>** | Unstages changes, keeping the working directory unchanged. |
| Commit changes | **git commit -m "commit message"** | Commits staged changes with a descriptive commit message. |
| Push changes to a branch | **git push origin <branch>** | Pushes committed changes to a specific branch on GitHub. |
| Create a new branch | **git branch <branch\_name>** | Creates a new branch with the given name. |
| Switch to a branch | **git checkout <branch>** | Switches to the specified branch. |
| Create and switch to a new branch | **git checkout -b <new\_branch>** | Creates and switches to a new branch in one command. |
| Merge changes from another branch | **git merge <other\_branch>** | Merges changes from another branch into the current branch. |
| Pull changes from a remote repository | **git pull origin <branch>** | Fetches and merges changes from a remote repository. |
| View commit history | **git log** | Shows a log of all commits in reverse chronological order. |
| View differences between commits | **git diff <commit1>..<commit2>** | Shows the differences between two commits. |
| Undo the last commit | **git reset HEAD^** or **git reset --soft HEAD^** | Undoes the last commit, keeping changes in the working directory. |
| Discard changes in working directory | **git checkout -- <file>** | Discards changes in the working directory for a specific file. |
| Delete a branch | **git branch -d <branch\_name>** | Deletes the specified branch. |
| Delete a remote branch | **git push origin --delete <branch\_name>** | Deletes a remote branch on GitHub. |