GIT BASICS:

Initial setup and creating a repository
git init: Initializes a new, empty Git repository in your current directory by creating a hidden .git folder.
git clone <repository_url>: Creates a local working copy of an existing remote repository, including all files, branches, and history.
git config --global user.name "[your name]": Sets your name for commits across all your local repositories.
git config --global user.email "[your email]": Sets your email for commits across all your local repositories.

Saving your changes
git status: Shows the current state of your working directory. It displays modified, staged, and untracked files.
git add <file_name>: Adds a specific file to the staging area, which is where you prepare changes for your next commit.
git add .: Adds all new and modified files in the current directory and its subdirectories to the staging area.
git commit -m "[commit message]": Permanently saves the staged changes to your local repository's history, along with a descriptive message.

Branching and merging
git branch: Lists all local branches in the current repository.
git branch <branch_name>: Creates a new branch with the specified name.
git checkout <branch_name>: Switches to an existing branch to start working on it. In newer versions of Git, git switch <branch_name> is the preferred command for this.
git checkout -b <new_branch_name>: Creates and switches to a new branch in a single command.
git merge <branch_name>: Merges the specified branch's history into your current branch.
git branch -d <branch_name>: Deletes the specified local branch.

Syncing with a remote repository
git remote add origin <repository_url>: Connects your local repository to a remote repository, using "origin" as a shortcut name.
git push -u origin <branch_name>: Pushes your local commits to the specified remote branch. The -u flag sets the upstream branch, so you can use git push in the future.
git pull: Fetches the latest changes from the remote repository and merges them into your current local branch.
git fetch: Downloads all changes from a remote repository but does not merge them into your local branches, allowing you to review them first.

Other useful commands
git log: Shows a chronological log of all commits in the current branch.
git stash: Temporarily saves your uncommitted changes without committing them, so you can switch to a different task.
git stash pop: Restores the most recently stashed changes to your working directory.
git revert <commit_hash>: Creates a new commit that undoes the changes from a previous commit.