Git Staging Notes

## What is Staging?

The staging area (also called index) is a middle ground between your working directory and the repository. It lets you prepare changes before committing them to Git history. Think of it as a “preview area” where you decide what exactly should go into the next commit.

## Key Concepts

1. Working Directory – Where you make changes. Not tracked until staged.  
2. Staging Area (Index) – Holds changes ready to be committed. You can selectively stage files or parts of files.  
3. Repository – Where committed changes are stored permanently.

## Common Commands

Check status:  
git status  
  
Stage a single file:  
git add filename  
  
Stage all changes:  
git add .  
  
Unstage a file:  
git restore --staged filename  
  
Commit staged changes:  
git commit -m "Your commit message"  
  
Stage parts of a file (interactive):  
git add -p filename

## In short

- Working Directory → Your changes.  
- Staging Area → What will go into the next commit.  
- Repository → Where committed changes live.  
- git add → Stage changes.  
- git commit → Save staged changes to repository.