

Creating

To create a local repository
`cd ~/projects/myproject`
`git init`
`git add .`

To clone from a remote repository (possible ways to do it)
`git clone ~/existing/repo ~/new/repo`
`git clone git://host.org/project.git`
`git clone ssh://you@host.org/proj.git`

Local

git checkout [-b] Switches HEAD to given branch -b for creating a branch

git commit [--amend] Adds a new commit; --amend for a slight change to current commit

git tag Adds a tag

git describe Describes how far is the nearest ancestor with a tag

git merge Merges two commits

git log Displays changes to the project

git rebase [-i] Creates a copy of commits from HEAD to a given commit; -i for an interactive mode

git branch [-f] [-u] [-d] Creates a new branch; -f for force; -u for specifying which branch to track; -d for deleting a branch;

git cherry-pick Adds to the HEAD commits that are not ancestors in a given order

git reset Deletes a HEAD commit

git revert Creates a new commit that undoes the changes from a previous commit

Main difference between **git merge** and **git rebase** is that rebase makes commits to be in a one line under each other on a tree, which leads to loosing the order of changes. Merge creates a new commit which keeps the order of changes in the project. It's just the matter of tree simplicity and keeping changes between them.

Remote

git clone Clones from a remote repository

git fetch Downloads all commits, but doesn't merges or rebases them in a local project

git pull [--rebase] Combines **git fetch** and **git merge**; --rebase for **git rebase** instead of **git merge**

git push Uploads commits

Fetch, pull and push have a specific syntax if we want to specify the source and destination commits. Basically we can use two forms:

git fetch/pull/push destination source for whole commit tree branch

git fetch/pull/push origin source:destination for specific commits

