

Create Git Repository

From existing directory

```
cd project_dir
```

```
git init
```

```
git add .
```

From other repository

```
git clone existing_dir new_dir
```

```
git clone git://github.com/user/repo.git
```

```
git clone https://github.com/user/repo.git
```

Git - Local Changes

Changed in working directory

```
git status
```

Tracked file changes

```
git diff
```

Add changed files

```
git add file1 file2 file3
```

Remove file

```
git rm file
```

```
git rm dir/ -r
```

(recursive under directory)

See files ready for commit

```
git diff --cached
```

Commit changes

```
git commit
```

```
git commit -m "My message"
```

```
git commit -a -m "My Message"
```

(tracked files only, auto add)

Change last commit

```
git commit --amend
```

Revert changes to file

```
git checkout -- file
```

Revert changes (new commit)

```
git revert HEAD
```

Return to last committed state

```
git reset --hard HEAD
```

Git - History

Show all commits

```
git log
```

Short Format

```
git log --pretty=short
```

Patches

```
git log -p
```

Show file commits

```
git log file
```

Show directory commits

```
git log dir/
```

Stats

```
git log --stat
```

Who changed file

```
git blame file
```

Git - Merge/Rebase

Merge branch into current

```
git merge branch
```

Rebase into branch

```
git rebase branch
```

```
git rebase master branch
```

Abort rebase

```
git rebase --abort
```

Merge tool to solve conflicts

```
git mergetool
```

Conflicts against base file

```
git diff --base file
```

Diff other users changes

```
git diff --theirs file
```

Diff your changes

```
git diff --ours file
```

After resolving conflicts

```
git rebase --continue
```

Git - Remote Update / Publish

List remotes

```
git remote -v
```

Show information

```
git remote show remote
```

Add remote

```
git remote add path/url
```

Fetch changes

```
git fetch remote
```

Fetch + merge

```
git pull remote branch
```

Publish local to remote

```
git push remote branch
```

Delete remote branch

```
git push remote :branch
```

Publish tags

```
git push --tags
```

Git - Branching/Tagging

List branches

```
git branch
```

Switch to branch

```
git checkout branch
```

Create new branch

```
git branch new
```

Create branch from existing

```
git branch new existing
```

Delete branch

```
git branch -d branch
```

Tag current commit

```
git tag tag-name
```