I want to...

...stage a file for commit

```
git add <file>
```

these commands all accept a single file, multiple files, or directories

...stage only parts of a file

```
git add -p
```

...check which things are not staged

```
git diff
```

...check which things are staged

```
git diff --staged
```

...make a commit of what's staged

```
git commit
```

...unstage something

```
git reset HEAD
```

...throw away local changes

```
git checkout --
```

...check the version history

```
git log
git log --stat
git log --oneline
```

...look at the history inside a file

```
git blame <file>
```

...inspect one particular commit

```
git show <commit SHA1>
```

short form

long form

...define shorter commands

```
git config --global -add alias.ci commit
```

...set my name

```
git config --global user.name "My Name"
```

...set my email

```
git config --global user.email my@email.com
```

...create a repository

there's also git init <repo>

```
mkdir <new repo directory>
cd <new repo directory>
git init
```

...switch to another branch

```
git checkout <branch>
```

add -b to create the branch you switch to

...compare two branches

```
git diff <branch>
git diff <branch1>..<branch2>
```

...see a list of all branches

```
git branch -a
```

...merge branch as one commit

often master

```
git checkout <target branch>
git merge --squash <branch>
```

...push my branch to remote first time

```
git push --set-upstream origin <branch>
```

... delete local branch

```
git branch -d <branch>
```

...stash non-staged things

```
git stash --keep-index
```

...modify last commit if not pushed

```
git commit --amend
```

...undo a commit that is pushed

```
git revert <commit SHA1>
```

...undo last commit that is not pushed

```
git reset --soft HEAD~1
```

...pull without merge commit

```
git pull --rebase
```

...get remote changes without applying

```
git fetch
```