

Git

```
git status      // shows all the files that are updated deleted or created, but not committed
git add .       // tells which file to track, any new created file stays retracted. dot means all
git add filename
git commit -m "title" -m "description"      // only made changes locally
git push        // want push this current repo where my repo is hosted
```

SSH key

```
ssh-keygen -t rsa -b 4096 -C "email"
ls | grep testkey
pbcopy < ~/testkey.pub      // to copy a file in terminal
```

To push code to github from vsCode with git

1. Generate ssh key-gen
2. Configure config file
3. Create repo in github
4. Vs code command

Steps to follow

1. ssh-keygen -t rsa -b 4096 -c "email@example.com"
2. give the name of the key ex. gitkey
3. ls | grep gitkey
4. cat gitkey.pub
5. pbcopy < ~/.ssh/gitkey.pub
6. add the key to github
7. run the necessary command to set the ssh key to mac
8. edit the config

```
Host *
    AddKeysToAgent yes
    UseKeychain yes
    IdentityFile ~/.ssh/id_rsa

Host github.com    #{sometimes the university wifi doesn't allow you to ssh}
    Hostname ssh.github.com
    Port 443
```

** if there is no config file create one with touch ~/.ssh/config

9. add the ssh file to the ssh agent ssh-add -k ~/.ssh/<key name that you created>
10. create a repo in github
11. cd to the folder in your computer that you want to push
12. git init
13. git status
14. git add .

15. git commit -m "just kidding" -m "first time setting git is quite hard"
16. git remote add origin <link of the repo>
17. git remote -v
18. git branch -m main
19. git push -u origin main

After setting up common command for push

```
git status
git add .
git commit -m "someting"
git push
```

Github Workflow

1. Write code
2. Commit changes
3. Make a pull request

Local Git Workflow

1. Write code
2. Stage changes - git add
3. Commit changes - git commit
4. Push changes - git push
5. Make a pull request

Git Branch

```
git branch
git checkout -b <branch-name> // to create a new branch
git checkout //to change the branch
```

```
git diff feature // tells you the changes in the code with the master branch
git merge feature // merge the changes
git push -u origin feature // -u stands for --set-upstream
```

```
git pull origin master
```

```
git branch -d feature // delete a branch
git commit -am "comment" // add and message same time, only works with modified files
git merge master // up to-date with the changes into master
```

Stash (functionality) make the changes and save later to retrieve, not commit to git

```
git reset // will undo the git add filename command
git reset HEAD~1 // undo the last commit
git log
git reset <hash> // unstaged any commit after the particular commit
git reset --hard <hash> // not just benign unstaged but completely removed
```