

# Introduction to Git

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A few git commands are `git`, `git init`.

## Create a folder

So first we create a folder and then access it with `cd`

`mkdir NAME`; `cd NAME` and run `git init` so that it can create a clone and upload it into a repository on GitHub.

## Create an empty file

Create a file/files and write something in it/them.

`touch NAME.txt` to create a file and then `vim NAME.txt`

## New Repository in GitHub

Go to GitHub and create a repository and make it public.

## Public Key / Private Key

So first you generate a key

`ssh-keygen -t ed25519` or `ssh-keygen -t rsa`

Then you use `cd` to exit everything

and then you type this command to figure out the key code

`cat ~/.ssh/id_ed25519.pub` or `cat ~/.ssh/id_rsa.pub`

Then copy the code and go to GitHub > Settings > SSH and GPG Key > New SSH Key

Now give it a name and paste the code.

## Upload to new repo

now use `cd /cloud/project/NAME` to get to the directory you want to upload

now use `git add .` which adds like a git file thingy that is necessary for upload

now use `git config --global user.email "your_email@example.com"`

now use `git commit -m 'NAME YOUR COMMIT'` to tell R what to upload

also use `git remote add origin git@github.com:USERNAME/REPONAME.git` to tell R in which repository to upload

Ok so now it gets complex

So first use `ssh -T git@github.com` to tell R which GitHub you are using

And now use `eval "$(ssh-agent -s)"` to start up your ssh-agent

Then use `ssh-add ~/.ssh/id_ed25519` or `ssh-add ~/.ssh/id_rsa` to add the code to your ssh agent

and finally use `git push origin master` or `git push origin main` to upload