* **Git is the tool / software / program that is used to keep track of your project files — it is the “version control” system, where the word “version” here refers to the changes or revisions that you make to your project over time.**
* **GitHub, at its core, is simply a website designed to host projects that are being tracked using Git. Since it’s just a “hosting service,” it’s not the only website that does this — other websites can host Git projects, such as Bitbucket, though GitHub is arguably the most popular. GitHub adds on a lot of tools and views of your project that go along with version control and aid with collaborating with other people on your project (later in the article I’ll talk about one feature, pull requests).**

**If you dont have github account then first you have to create it on github.com after that you will have username and email**

**Download and install Git for Linux:**

apt-get install git

**Configuring GitHub**

**set up the configuration details of the GitHub user.**

git config --global user.name "abhizarkar-png"

git config --global user.email "abhizarkar0@gmail.com"

**Creating a local repository**

**Create a folder on your system anywhere. This will pushed onto the GitHub website.**

mkdir mydocs

git init mydocs

cd mydocs

**Adding repository files to an index**

**This is an important step. Here we add all the files that need to be pushed onto the website.These filesmight be the text file, programs, script or any document that you might add for the firsttime into the repository.**

**so, now create file for testenig**

vi test.sh

{add contents}

vi sample.c

{add contents}

**now we have 2 files**

test.sh and sample.c

**add it to the index by using the following 2 commands:**

git add test.sh

git sample.c

**Committing changes made to the index**

**A commit is a record of what files you have changed since the last time you made a commit.**

**Essentially, you make changes to your repo (for example, adding a file or modifying one) and**

**then tell git to put those files into a commit.**

git commit -m "this is for testing"

**Creating a repository on GitHub**

**Create a repository on GitHub. Notice that the name of the repository should be the same as the**

**repository's on the local system.**

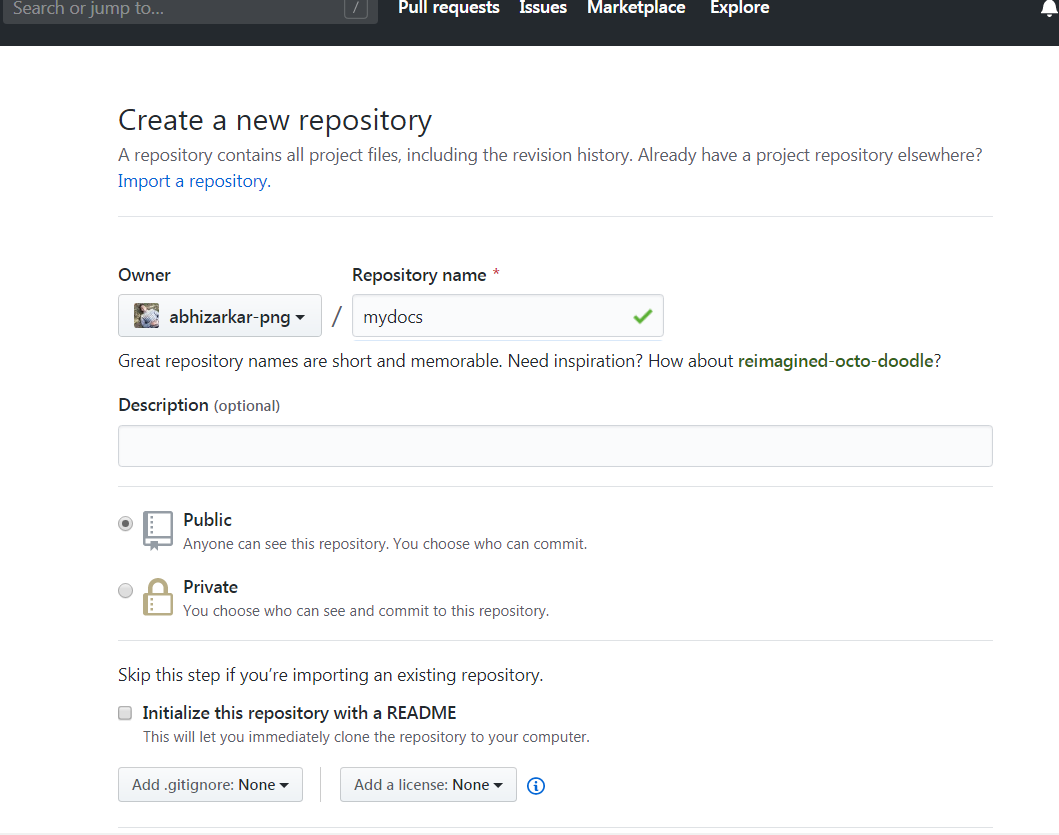
**Once this is created, we can push the contents of the local repository onto the GitHub repository**

**In this case, it will be "mydocs". To do this login to your account on https://github.com.**

**Then click on the "plus(+)" symbol at the top right corner of the page and select**

**"create new repository". Fill the details as shown in the image below and click on**

**"create repository" button.**



**Once this is created, we can push the contents of the local repository onto the GitHub repository in your profile.**

**Make sure you replace 'user\_name' and 'mydocs' in the path with your Github username and folder before running the command!**

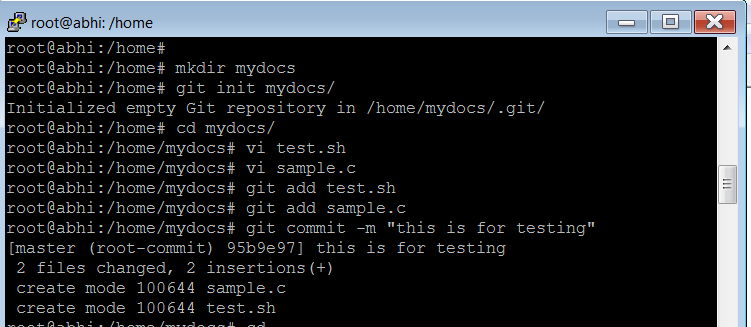
git remote add origin https://github.com/abhizarkar-png/mydocs.git

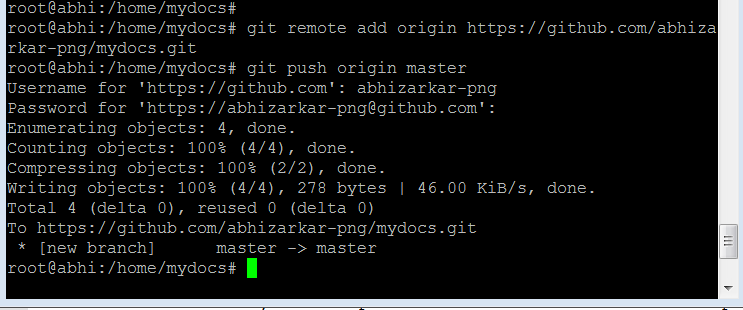
**Pushing files in local repository to GitHub repository**

git push origin master

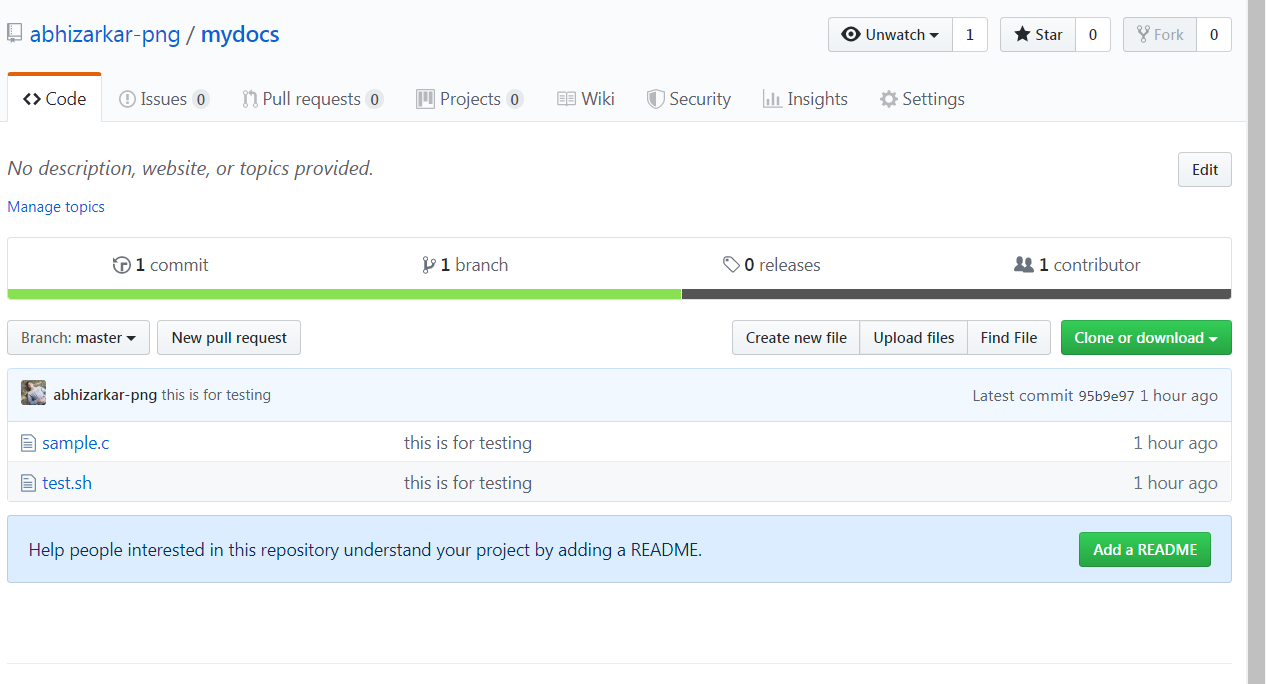
**Enter the login credentials [user\_name and password].**

**The following image shows the procedure**





**So this adds all the contents of the 'Mydocs' folder (my local repository) to GitHub**.



Cloning repository

**When you create a repository on GitHub, it exists as a remote repository. You can clone your repository to create a local copy on anu computer and sync between the two locations.**

**Cloning a repository syncs it to your any local machine. After you clone, you can add and edit files and then push and pull updates.**

**{ NOTE: You can do any other server }**

**first you have to add your ssh public key in github**

ssh-keygen -t rsa

cd .ssh

cat id\_rsa.pub

ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDhg7v2DrPSQlhCYwWtsGTEWRRw0na1ojTC3BzbiWbV7AlMY0dfbr3g6bM65jNeOBplDfEJIldXuVfSyoUY3kVJ8Cfa+LC77tDO5HEf2BhFNIzGVrghZahJWU+AAKX0kCpl/MxduDLVtO2kT9HO6xiwiWPvUBZm284PQyBfkwx2NQI4nATTewNgGH9P6q9F3gXt8/M4ksIEU7GHI/9vCjCkyoX595hdyRT6JwA0SEsYM4ua5IPwIVL3YXzMmbR4FaMERhGP1aMAtRW/SR5nk4j73u4TuG5MtXzD6G27rPZgTebfpbKpn+7C8L6oe0jFkjfWUQhPgT3hYyLznh5Xwv2V root@deepak

**copy the public key and add in github, for add you have to click on setting and SSH and GPG keys then new ssh key and paste the key**

**after that you can proced the next step**

**make directory where you want to create clone**

mkdir myproject

cd myproject

git clone https://github.com/abhizarkar-png/mydocs.git

**{make sure your username and repo name is correct or not}**

**after that you will get the repo mydocs in myproject, simply enter the mydocs and you will get all files, in our case test.sh and sample.c**

**if you want create some programs or scrips then you have to just create program**

vi abhi.txt

**for add this file in repo type belows command**

git add abhi.txt

git commit -m "this is for testing"

git push

**then you can check in webinterface**

**useful links**

<https://www.linode.com/docs/development/version-control/how-to-install-git-and-clone-a-github-repository/>

<https://git-scm.com/book/en/v2/GitHub-Account-Setup-and-Configuration>