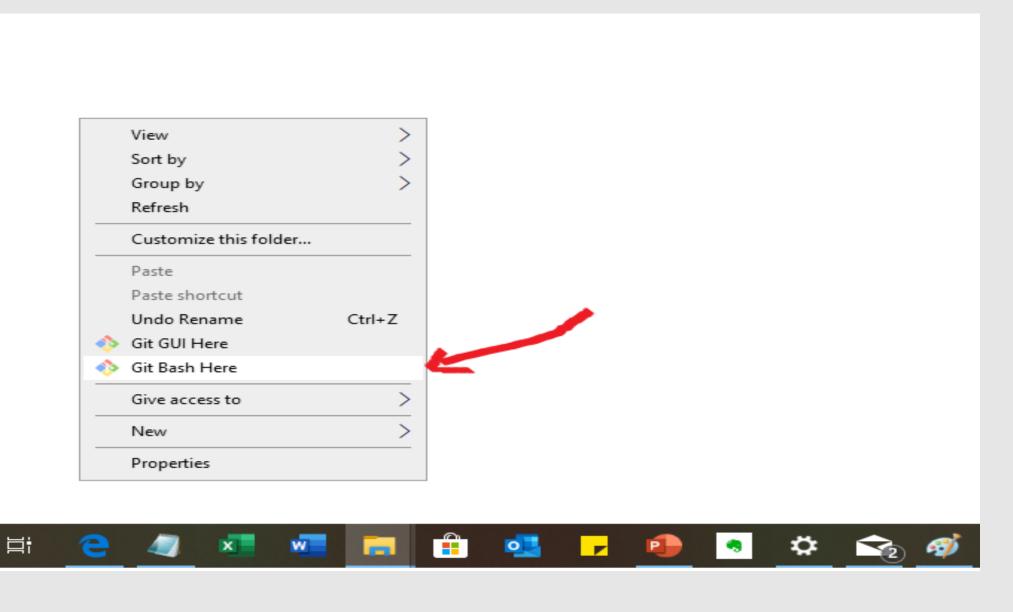


Install the git in windows follow the link https://gitforwindows.org/

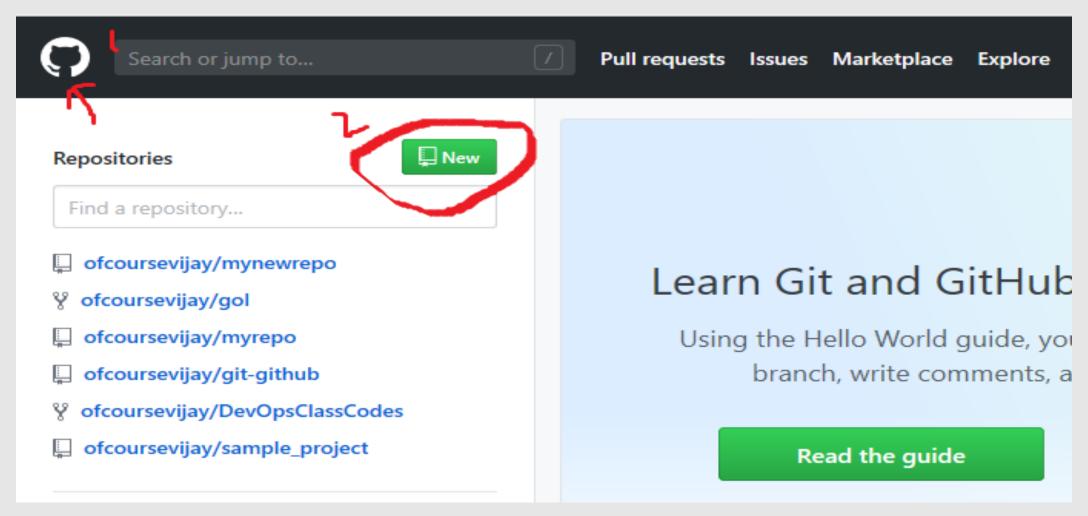
- 1. Create a folder in any drive name "yourname_git_demo"
- 2. Navigate into the created folder and right_click
- 3. Choose the option "Git Bash Here"
- 4. In the Git Bash terminal type "git init", it will initialize empty git repository (Stay in the same folder)

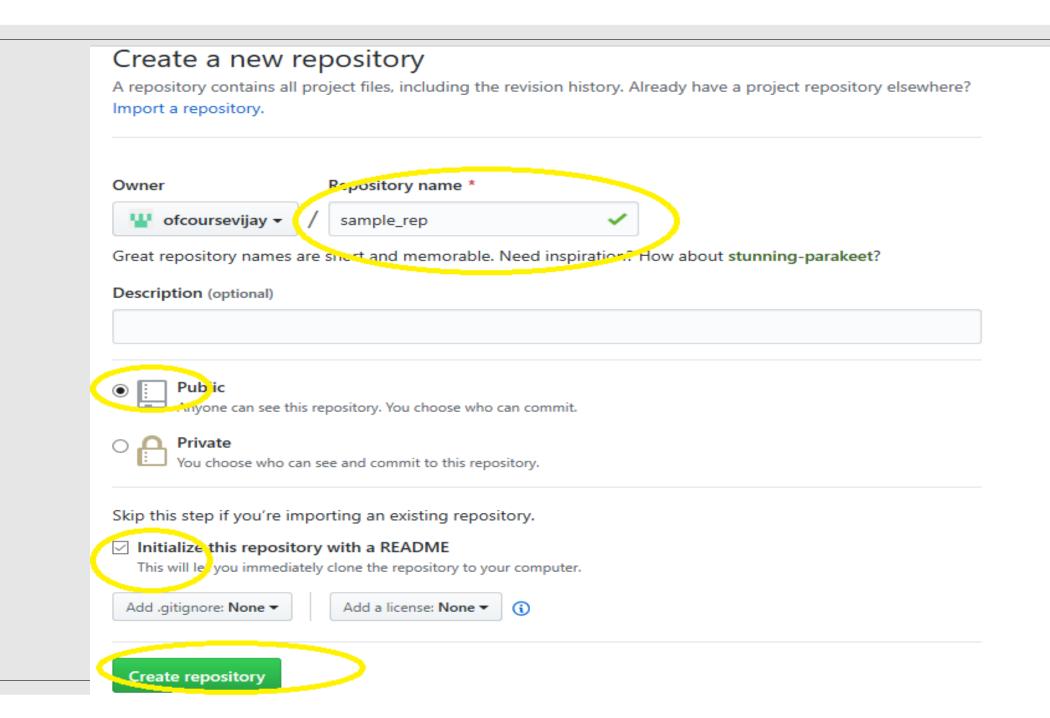


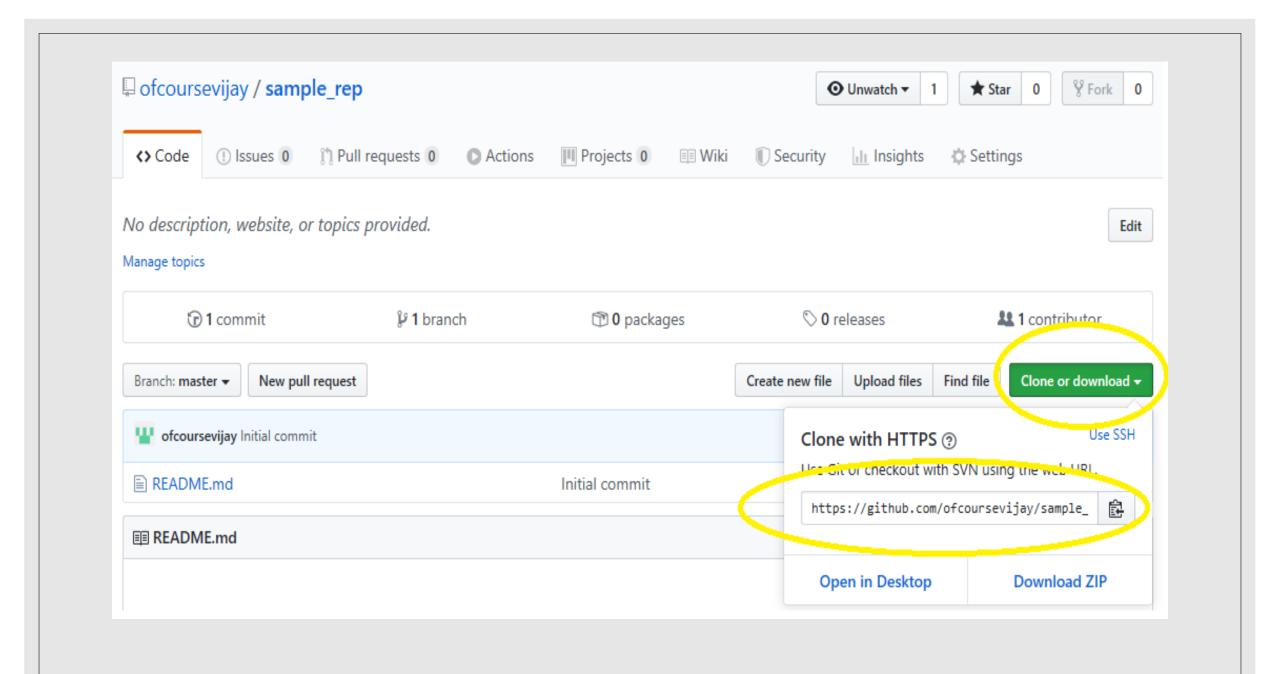




#######SYNCING REPOSITORY#########





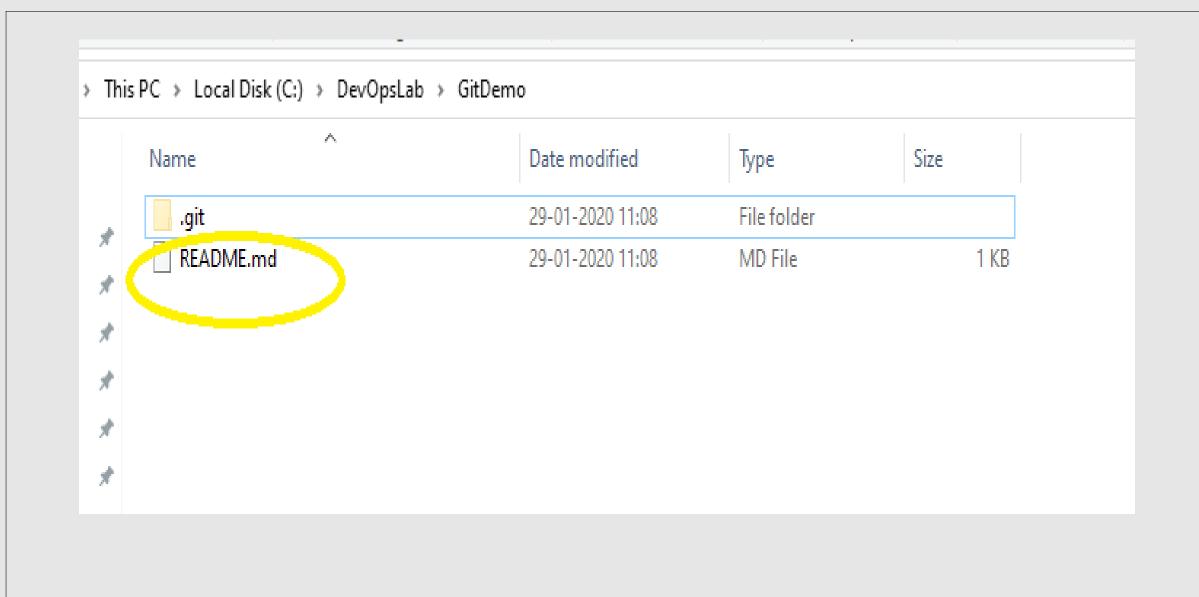


#linking remote repository

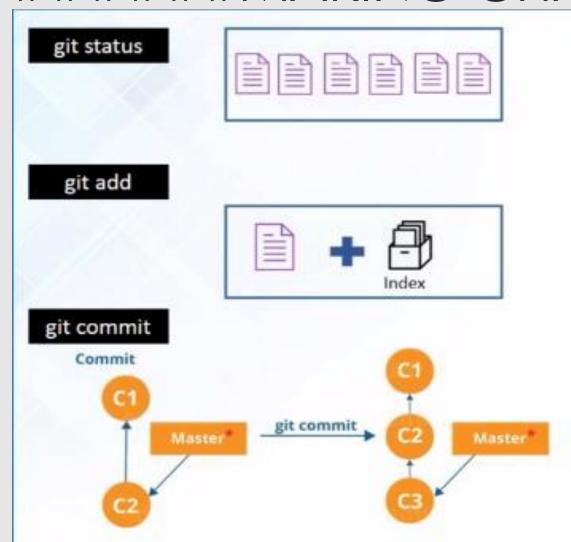
git remote add origin "copy and paste the link from your git-hub repository, if you have already created (Otherwise create a new repository using your git account)"

git pull origin master

```
MINGW64:/c/DevOpsLab/GitDemo
 Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
  git remote add origin "https://github.com/ofcoursevijay/sample_rep.git"
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
💲 git pull origin master 🧲
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/ofcoursevijay/sample_rep
 * branch
                master -> FETCH_HEAD
 * [new branch] master
                                -> origin/master
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
                                                      Onen in Dealston
```



#######MAKING CHANGES

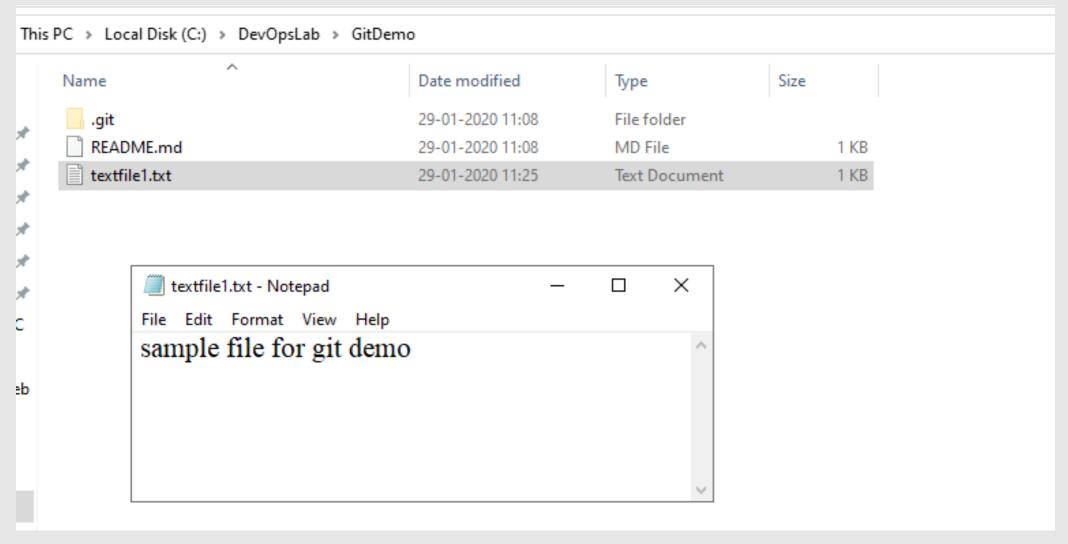


Tells you which files are added to index and are ready to commit.

Lets you add files to your index.

- It refers to recording snapshots of the repository at a given time.
- Committed snapshots will never change unless done explicitly.

Create some text file and write anything into it



```
MINGW64:/c/DevOpsLab/GitDemo
Dell@deskTop_ockon5A MINGW64 /c/DevOpsLab/GitDemo (master)
$(git status
On br<del>anch mas</del>ter
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        textfile1.txt
nothing added to commit but untracked files present (use "git add" to track
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```

```
MINGW64:/c/DevOpsLab/GitDemo
Dell@DESKTOP-OCKON5A_MINGW64 /c/DevOpsLab/GitDemo (master)
$ git add textfile1.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)
        new file: textfile1.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```

- # Navigate into the created folder and right click->new->Text document
- # Name the file as text1 and write something into the file and save it.

git status

git add textfile1.txt

git status

git commit -m "first commit"

changes finally committed in local repository

create more files in the same folder as text2.txt, text3.txt and repeate and understand the above procedure.

Explore what is tracked file, untracked file and modified file.

git add -A // is used to add all files at once.

git status

git commit -a -m "adding all files together"

Changes to be committed:

(use "git reset HEAD <file>..." to unstage)

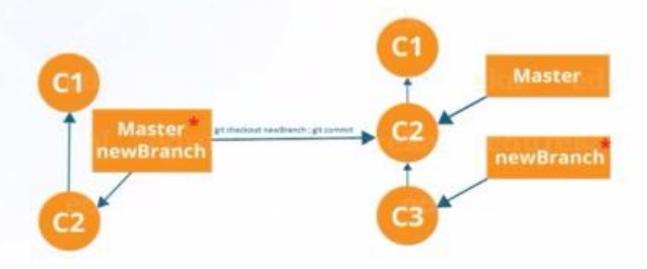
new file: textfile1.txt

Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
\$ git commit -m "first commit in local repository"
[master df934f7] first commit in local repository
 1 file changed, 1 insertion(+)
 create mode 100644 textfile1.txt

to check how git stores all the commits, use git log

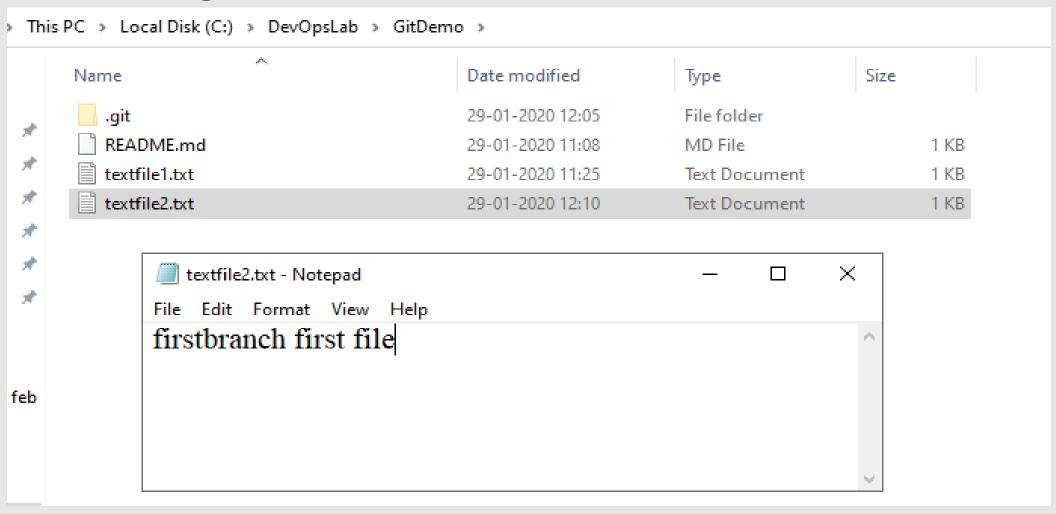
```
MINGW64:/c/DevOpsLab/GitDemo
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ git log
commit df934f793ddc72c376496d466c78039a3248f8b6 (HEAD -> master)
Author: Vijay Singh <vijaysingh_agra@hotmail.com>
        Wed Jan 29 11:42:28 2020 +0530
Date:
    first commit in local repository
commit b99c2f98bb59b18a46fb9a431d08b2e23c52616f (origin/master)
Author: ofcoursevijay <37365613+ofcoursevijay@users.noreply.github.com>
        Wed Jan 29 11:03:03 2020 +0530
Date:
    Initial commit
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```


- Branches are pointers to a specific commit.
- Branches are of two types:
 - Local branches
 - Remote-tracking branches



Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo/(master) \$ git branch firstbranch Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master) \$ git checkout firstbranch Switched to branch 'firstbranch' Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)

Create some text file in the same folder and write something into it



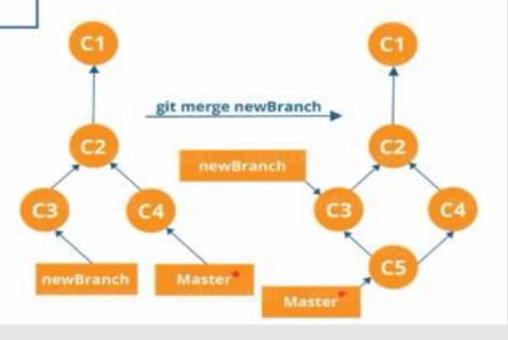
```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git add textfile2.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git commit -m "making changes in firstbranch"
[firstbranch a4f37f1] making changes in firstbranch
1 file changed, 1 insertion(+)
 create mode 100644 textfile2.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
```

```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ 1s
README.md textfile1.txt textfile2.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git checkout master
Switched to branch 'master'
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ 1s
README.md textfile1.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```

Merging

- It is a way to combine the work of different branches together.
- Allows to branch off, develop a new feature & combine it back in.

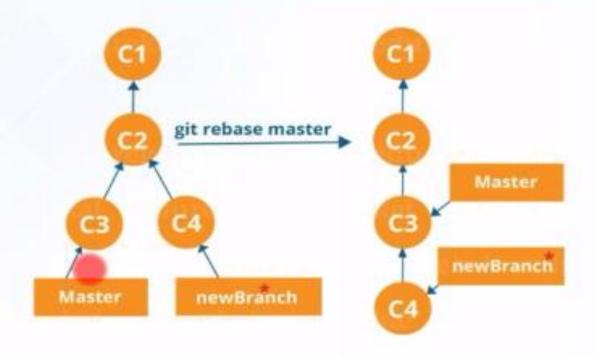




```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ 1s
README.md textfile1.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ git merge firstbranch
Updating df934f7..a4f37f1
Fast-forward
 textfile2.txt | 1 +
1 file changed, 1 insertion(+)
 create mode 100644 textfile2.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ 1s
README.md textfile1.txt textfile2.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```

Rebasing

- This is also a way of combining the work between different branches.
- It can be used to make a linear sequence of commits.



Create some text files as textfile3.txt and textfile4.txt and write something into it

> This PC > Local Disk (C:) > DevOpsLab > GitDemo >

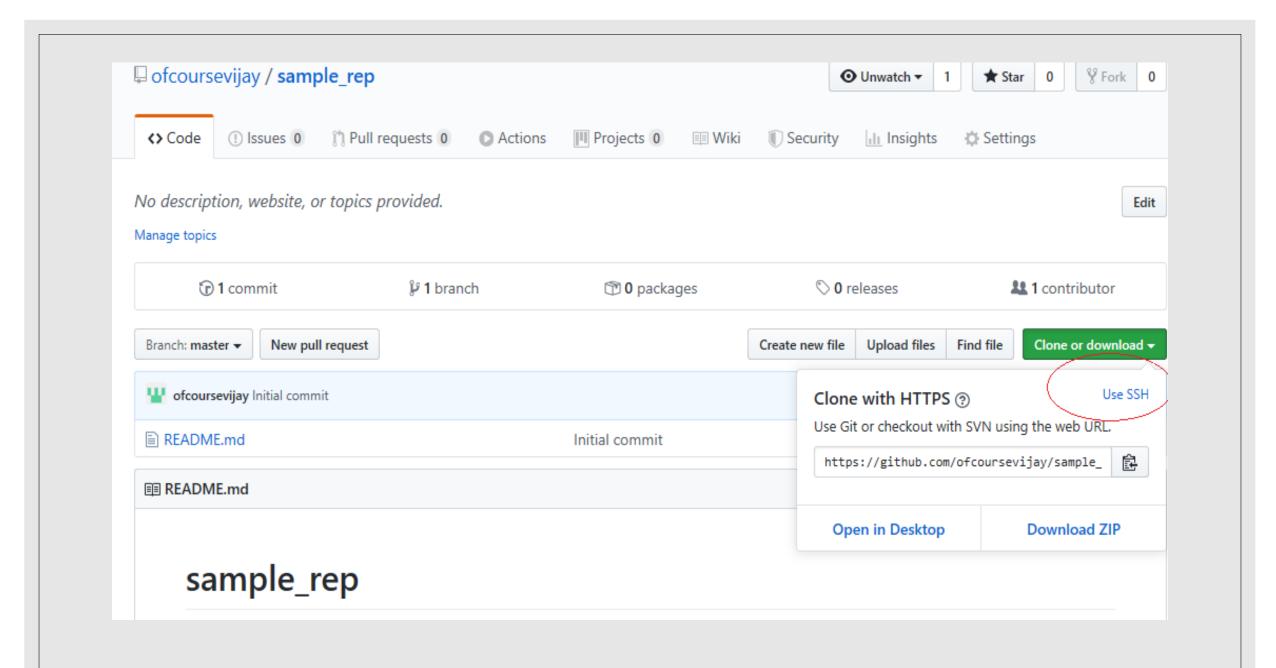
	Name	Date modified	Туре	Size
	.git	29-01-2020 13:20	File folder	
*	README.md	29-01-2020 11:08	MD File	1 KB
*	testfile3.txt	29-01-2020 13:21	Text Document	1 KB
A.	textfile1.txt	29-01-2020 11:25	Text Document	1 KB
*	textfile2.txt	29-01-2020 13:07	Text Document	1 KB
*	textfile4.txt	29-01-2020 13:21	Text Document	1 KB

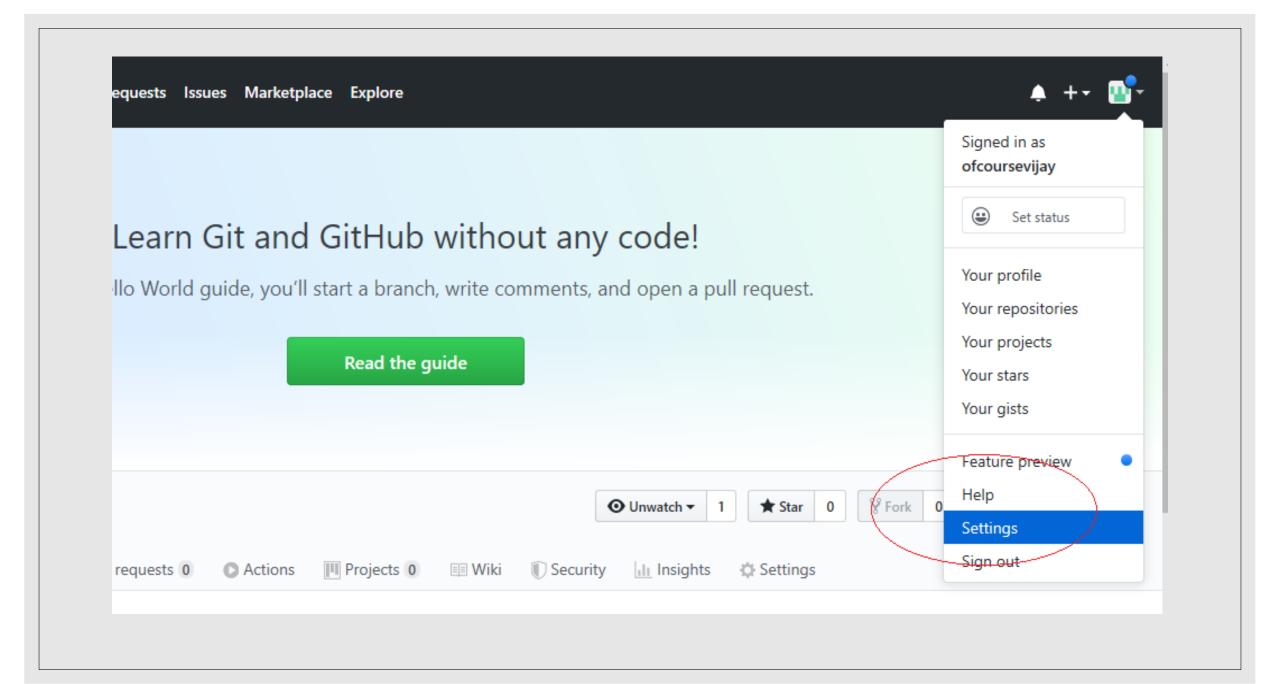
```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ git checkout firstbranch
Switched to branch 'firstbranch'
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git add -A
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git commit -a -m "adding files for rebasing demo"
[firstbranch 2c75a32] adding files for rebasing demo
2 files changed, 2 insertions(+)
 create mode 100644 testfile3.txt
 create mode 100644 textfile4.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
```

```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ 1s
README.md testfile3.txt textfile1.txt textfile2.txt textfile4.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git checkout master
Switched to branch 'master'
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ 1s
README.md textfile1.txt textfile2.txt
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```

```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ git checkout firstbranch
Switched to branch 'firstbranch'
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git rebase master
Current branch firstbranch is up to date.
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
```

```
PDell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ ssh-Keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/Dell/.ssh/id_rsa):
/c/Users/Dell/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Dell/.ssh/id_rsa.
BYour public key has been saved in /c/Users/Dell/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:/SIkstH/9gLWqy7ru6SHpi0H5pwyK6jQa6VP0GM329I Dell@DESKTOP-OCKON5A
The key's randomart image is:
 +---[RSA 2048]---+
  . 0.* 00 ..
 0..00.+.E....
 X.*0000. 0+.
 OX0=00=*00.0.
+----[SHA256]----+
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
   cat /c/Users/Dell/.ssh/id_rsa.pub
```





Account

Profile

Security

Security log

Emails

Notifications

Billing

SSH and GPG keys

Blocked users

Repositories

Public profile

Name

Your name may appear around GitHub where you contribute or are mentioned. You can remove it at any time.

Public email

Select a verified email to display \$

You have set your email address to private. To toggle email privacy, go to email settings and uncheck "Keep my email address private."

Bio

Tell us a little bit about yourself

You can @mention other users and organizations to link to them.

SSH keys

New SSH key

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.



ssh1

40:53:f1:15:20:c2:1e:ec:e7:e4:75:94:c0:ed:a7:3b

Delete

SSH

Added on 8 Feb 2019

Never used — Read/write

Check out our guide to generating SSH keys or troubleshoot common SSH Problems.

GPG keys

New GPG key

Personal settings Profile Account Security Security log Emails Notifications Billing SSH and GPG keys Blocked users Repositories Organizations

SSH keys / Add new

Title

ss2

Key

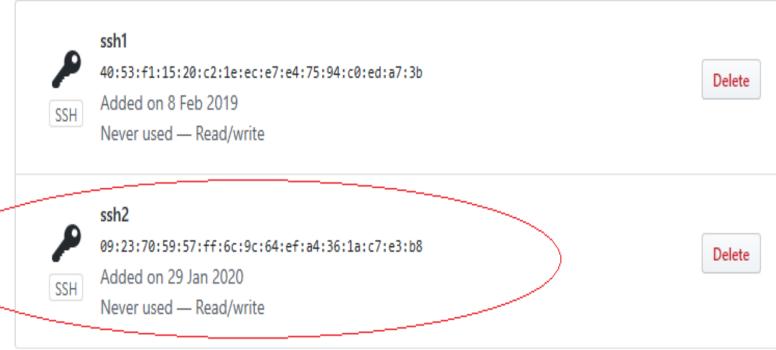
mOUonUb17zHUfOcjSDqqy1/q8wZEfg9K04SKQ7Y4yQi8dVEp+wWIRbQUaYGF3YOv
QgdXO897W0mage/AJoMgeSmcqlpJEpuVExjnWhMCgYBmNz7aniCVHPVynbO2clD0
gnb/8KrYImcleQiqGoQt3RuYeAH1j76gAgCoN/H7hHtEggzKAy+hmjyw89sL81e8
WJ/RGOlcGTdxN8GdgwJbMRQ3aQBWp2ifBFoQlaSJalmLDyh3tc6XluRVtZuGgG7E
p2jbBOrDxHz3BXHIOj9qWQKBgFWs5R/mLH4ch7ZB+yW8b1cla9s89QPyZ2/9lcwy
Au7hdmtwptFsQdGivn3i+Aj0ITBRz03+EsuliGA/hqtC9NBMECv8JecfHU5leztl
8hsZpcm5ZUCp3/7umH3L2r3/W4DwqvbcgffaPqFuT2Pxbi9TXimzulCJR3Pxat/R
RHU5AoGBAMJkjZUNRXDILKoRM3MJp+ODhLCqrW+ePxx7qv0HF1MvmO+OvWkbshhO
Ztu7SU05gcu0QGGV9kALaKk5FaGaq7YHx/K3J5HXxq8BpmuWjd94t7Gs9QYvJsDo
PtrVvCkLr1zWTwPf9gBIE32Kuvd1+TdBuisDvHR7H10cLLv55KDO

Add SSH key

SSH keys Personal settings Profile Account ssh1 Security SSH Security log Emails ssh2 Notifications Billing SSH and GPG keys

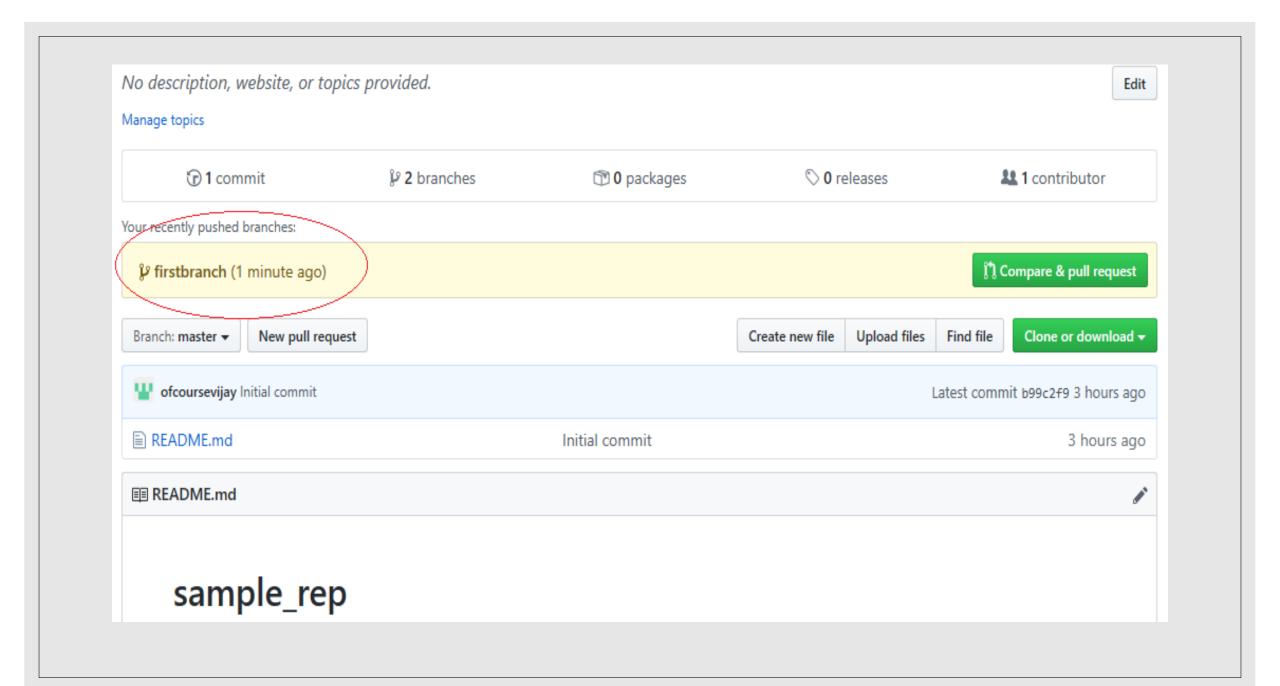
New SSH key

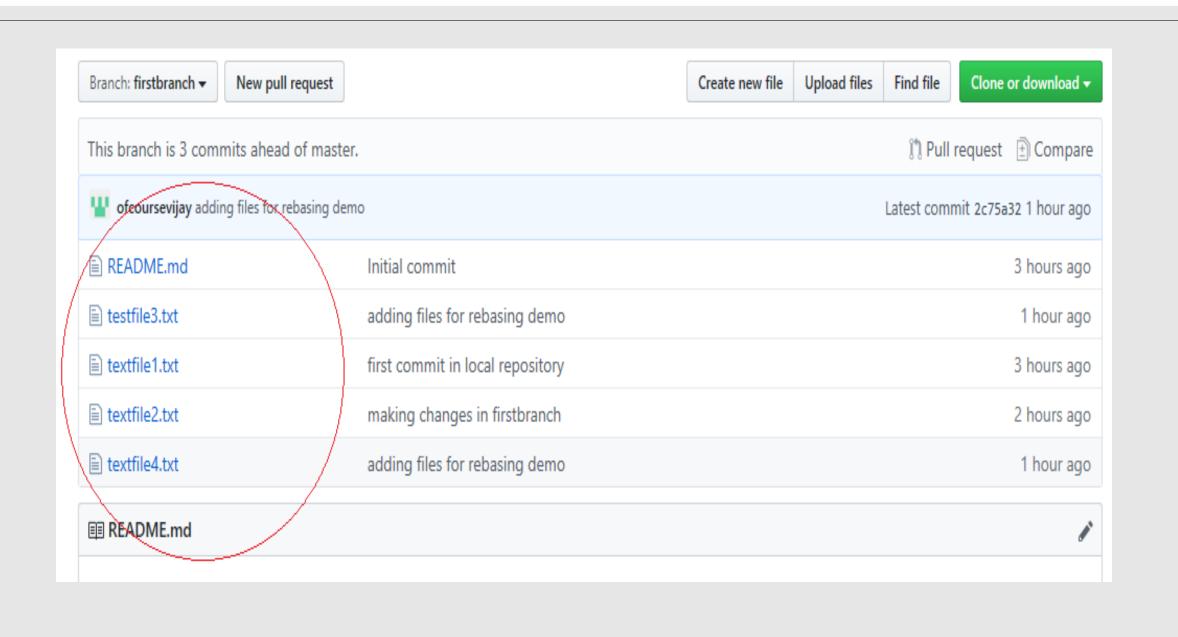
This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.



```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
 $ ssh -T git@github.com
 Warning: Permanently added the RSA host key for IP address '13.234.210.38' to the
sse list of known hosts.
 Hi ofcoursevijay! You've successfully authenticated, but GitHub does not provide
  shell access.
 Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```

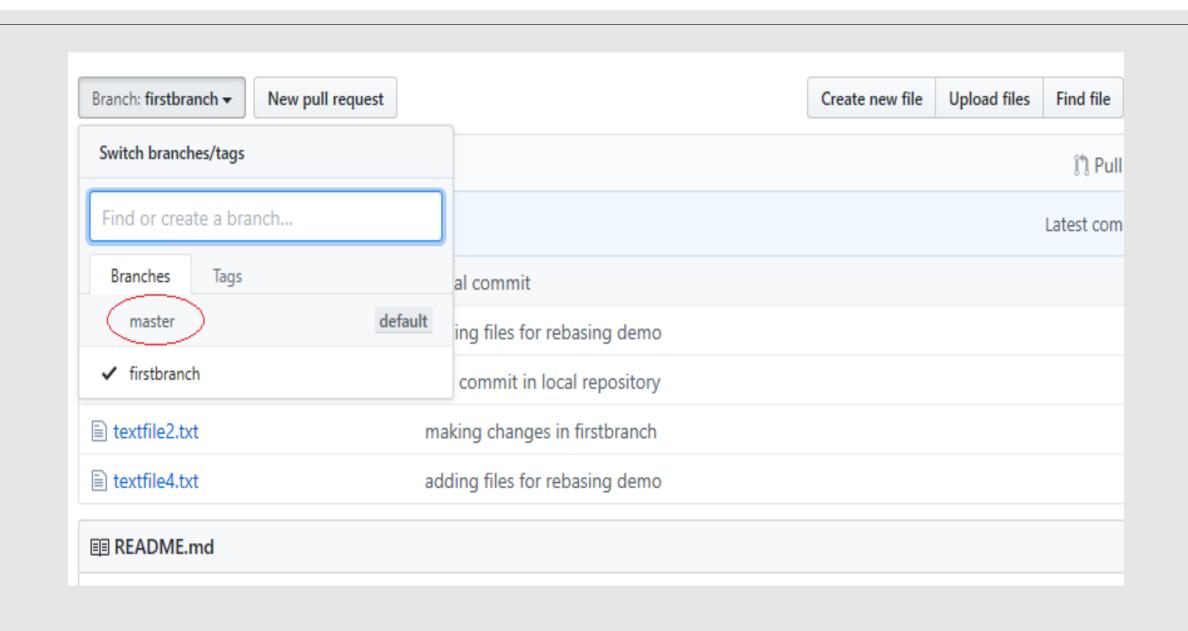
```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ git checkout firstbranch
Switched to branch 'firstbranch'
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git push origin firstbranch
Counting objects: 10, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (6/6), done.
Writing objects: 100% (10/10), 864 bytes | 432.00 KiB/s, done.
Total 10 (delta 2), reused 0 (delta 0)
remote: Resolving deltas: 100% (2/2), done.
remote:
remote: Create a pull request for 'firstbranch' on GitHub by visiting:
             https://github.com/ofcoursevijay/sample_rep/pull/new/firstbranch
remote:
remote:
To https://github.com/ofcoursevijay/sample_rep.git
 * [new branch] firstbranch -> firstbranch
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
```





MINGW64:/c/DevOpsLab/GitDemo

```
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (firstbranch)
$ git checkout master
Switched to branch 'master'
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
$ git push origin master
Total 0 (delta 0), reused 0 (delta 0)
To https://github.com/ofcoursevijay/sample_rep.git
   b99c2f9..2c75a32 master -> master
Dell@DESKTOP-OCKON5A MINGW64 /c/DevOpsLab/GitDemo (master)
```



New pull request Branch: master ▼ Create new file **W** ofcoursevijay adding files for rebasing demo README.md Initial commit testfile3.txt adding files for rebasing demo first commit in local repository textfile1.txt textfile2.txt making changes in firstbranch adding files for rebasing demo textfile4.txt ■ README.md

