Dvs Technologies Aws & Devops

Compiled and Scrutinized by
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Words To The Students

Though we have taken utmost efforts to present you this book error free, but still it may contain some errors or mistakes. Students are encouraged to bring, if there are any mistakes or errors in this document to our notice. So that it may be rectified in the next edition of this document.

"Suppressing your doubts is Hindering your growth".

We urge you to work hard and make use of the facilities we are providing to you, because there is no substitute for hard work. We wish you all the best for your future.

"The grass isn't greener on the other side; the grass is greener where you water it."

You and your suggestions are valuable to us; Help us to serve you better. In case of any suggestions, grievance, or complaints, please feel free to write us your suggestions, grievance and feedback on the following

Dvs.training@gmail.com

Git and Git Hub Learning::

We have many version control software's in market. They are as follows

1. CVS
2. PVCS
3. Subversion(svn)
4. Perforce
5. Microsoft Visual Sourcesafe
6. Mercurial
7. Teamsite
8. vault
9. Bitkeeper - Used to manage the linux kernel before
10. Git - Created by Linus author of linux

Different Phases as part of Git :

Initialization:
creating the empty repository for use

Clone:
Making a local full copy on your workstation

Checking out:
Locking a copy of one or more files for exclusive use

Branching:
Allowing a set of files to be developed concurrently and at different speeds for different reasons

Merging:
Taking different branches or sets of changes and integrating into one set or branch

Resolving:
Taking conflicting changes from multiple people on the same file and manually addressing

Commit:

Taking changes from the local system and comiting them to the branch

Push/Pull:

Taking changes locally or remotely and merging into one or more branches

Installation:

yum install git -y

```
[root@ip-172-31-9-43 ~]# yum install git -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
192 packages excluded due to repository priority protections
Resolving Dependencies
--> Running transaction check
---> Package git.x86_64 0:2.23.3-1.amzn2.0.1 will be installed
--> Processing Dependency: perl-Git = 2.23.3-1.amzn2.0.1 for package: git-2.23.3-1.amzn2.0.1.x86_64
--> Processing Dependency: git-core-doc = 2.23.3-1.amzn2.0.1 for package: git-2.23.3-1.amzn2.0.1.x86_64
--> Processing Dependency: git-core = 2.23.3-1.amzn2.0.1 for package: git-2.23.3-1.amzn2.0.1.x86_64
--> Processing Dependency: emacs-filesystem >= 25.3 for package: git-2.23.3-1.amzn2.0.1.x86_64
--> Processing Dependency: perl(Term::ReadKey) for package: git-2.23.3-1.amzn2.0.1.x86_64
--> Processing Dependency: perl(Git::I18N) for package: git-2.23.3-1.amzn2.0.1.x86_64
```

[root@node2 ~]# git --version
git version 2.7.5

```
[root@ip-172-31-9-43 mytest]# git --version
git version 2.23.3
[root@ip-172-31-9-43 mytest]#
```

Configuring User and email:

~/.gitconfig

```
[root@ip-172-31-9-43 mytest]# git config --global user.name "gituserid"
[root@ip-172-31-9-43 mytest]# git config --global user.email "shahan.aix@gmail.com"
[root@ip-172-31-9-43 mytest]# git config --list
user.name=gituserid
user.email=shahan.aix@gmail.com
[root@ip-172-31-9-43 mytest]# cat ~/.gitconfig
[user]
        name = gituserid
        email = shahan.aix@gmail.com
[root@ip-172-31-9-43 mytest]#
```

Basic Configuration:

/etc/gitconfig

We have three things to be considered here

--local :-> Deals with the local repository
--global:-> Deals with the global repository
--system :-> Deals with the system respository

configure the editor for our git

```
[root@ip-172-31-9-43 mytest]# git config --system system.editor vim
[root@ip-172-31-9-43 mytest]# git config --system system.name "mysystemname"
[root@ip-172-31-9-43 mytest]# cat /etc/gitconfig
[system]
        editor = vim
        name = mysystemname
[root@ip-172-31-9-43 mytest]# git config --list
system.editor=vim
system.name=mysystemname
user.name=gituserid
user.email=shahan.aix@gmail.com
[root@ip-172-31-9-43 mytest]#
```

Git Basics :

Empty Repositories:

Initializing empty folder as git repos with "git init ." command as specified below. Before initilization we don't have anything called ".git" but post initialization we can see that ".git" folder got created.

```
[root@ip-172-31-9-43 tmp]# mkdir myrepo
[root@ip-172-31-9-43 tmp]# cd myrepo/
[root@ip-172-31-9-43 myrepo]# ls -al
total 0
drwxr-xr-x  2 root root   6 Jul 27 18:05 .
drwxrwxrwt 12 root root 328 Jul 27 18:05 ..
[root@ip-172-31-9-43 myrepo]# git  init .
Initialized empty Git repository in /tmp/myrepo/.git/
[root@ip-172-31-9-43 myrepo]# ls -al
total 0
drwxr-xr-x  3 root root  18 Jul 27 18:05 .
drwxrwxrwt 12 root root 328 Jul 27 18:05 ..
drwxr-xr-x  7 root root 119 Jul 27 18:05 .git
[root@ip-172-31-9-43 myrepo]# ls -la .git/
total 12
drwxr-xr-x 7 root root 119 Jul 27 18:05 .
drwxr-xr-x 3 root root  18 Jul 27 18:05 ..
drwxr-xr-x 2 root root   6 Jul 27 18:05 branches
-rw-r--r-- 1 root root  92 Jul 27 18:05 config
-rw-r--r-- 1 root root  73 Jul 27 18:05 description
-rw-r--r-- 1 root root  23 Jul 27 18:05 HEAD
drwxr-xr-x 2 root root 301 Jul 27 18:05 hooks
drwxr-xr-x 2 root root  21 Jul 27 18:05 info
drwxr-xr-x 4 root root  30 Jul 27 18:05 objects
drwxr-xr-x 4 root root  31 Jul 27 18:05 refs
[root@ip-172-31-9-43 myrepo]#
```

Performing Operations:

We are going to perform below operations as part of our git

```
[root@ip-172-31-9-43 myrepo]# touch test{1..4}.txt
[root@ip-172-31-9-43 myrepo]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:09 test1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:09 test2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:09 test3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:09 test4.txt
```

```
[root@ip-172-31-9-43 myrepo]# git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        test1.txt
        test2.txt
        test3.txt
        test4.txt

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-172-31-9-43 myrepo]# git add .
[root@ip-172-31-9-43 myrepo]# git commit -m "adding test files"
[master (root-commit) d557bf5] adding test files
 4 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test1.txt
 create mode 100644 test2.txt
 create mode 100644 test3.txt
 create mode 100644 test4.txt
[root@ip-172-31-9-43 myrepo]# git status
On branch master
nothing to commit, working tree clean
[root@ip-172-31-9-43 myrepo]# git log
commit d557bf55b2d4d44aaa4334fd3657fe17210c3b49 (HEAD -> master)
Author: gituserid <shahan.aix@gmail.com>
Date:   Mon Jul 27 18:09:55 2020 +0000

    adding test files
```

Git Ignore:

Before adding the ".gitignore" file

```
[root@ip-172-31-9-43 myrepo]# git status
On branch master
nothing to commit, working tree clean
[root@ip-172-31-9-43 myrepo]# touch myscript.sh
[root@ip-172-31-9-43 myrepo]# git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        myscript.sh

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-172-31-9-43 myrepo]#
```

Post adding ".gitignore" file lets see if our git add/recognizes the myscript.sh file or not.

```
[root@ip-172-31-9-43 myrepo]# echo "*.sh" > .gitignore
[root@ip-172-31-9-43 myrepo]# git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-172-31-9-43 myrepo]# cat .gitignore
*.sh
[root@ip-172-31-9-43 myrepo]#
```

From the above output we can say that soon after we add our "*.sh" to our ".gitignore" file it's simply ignoring my files ending with "*.sh" files in our case its "myscript.sh"

Normal copy operation

```
[root@ip-172-31-9-43 tmp]# mkdir cpsrc cpdest
[root@ip-172-31-9-43 tmp]# touch cpsrc/test{1..4}.txt
[root@ip-172-31-9-43 tmp]# ls -l cpsrc/
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:21 test1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:21 test2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:21 test3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:21 test4.txt
[root@ip-172-31-9-43 tmp]# ls -l cpdest/
total 0
```

Post copy operation

```
[root@ip-172-31-9-43 tmp]# cp -rf cpsrc/* cpdest/
[root@ip-172-31-9-43 tmp]# ls -l cpdest/
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:24 test1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:24 test2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:24 test3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:24 test4.txt
[root@ip-172-31-9-43 tmp]#
```

Main drawback is if dest "localdest" is having update it can't sync directly with my source "localsrc". I have to do it manually by executing commands.

Cloning: Local Repositories:

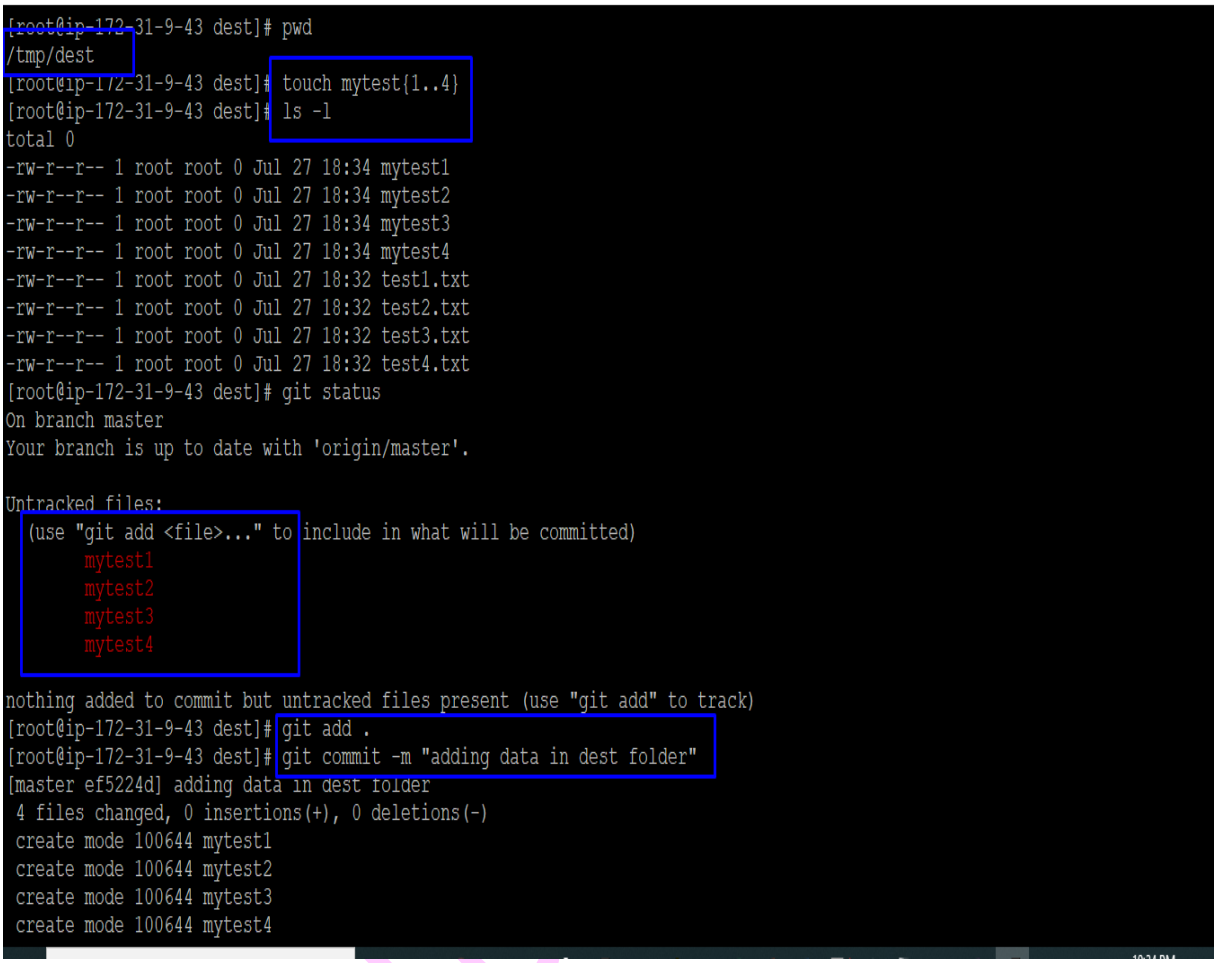
Perform the below operation in the src folder as below

```
[root@ip-172-31-9-43 tmp]# mkdir src
[root@ip-172-31-9-43 tmp]# cd src/
[root@ip-172-31-9-43 src]# git init .
Initialized empty Git repository in /tmp/src/.git/
[root@ip-172-31-9-43 src]# touch test{1..4}.txt
[root@ip-172-31-9-43 src]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:29 test1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:29 test2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:29 test3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:29 test4.txt
[root@ip-172-31-9-43 src]# git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        test1.txt
        test2.txt
        test3.txt
        test4.txt

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-172-31-9-43 src]# git add .
[root@ip-172-31-9-43 src]# git commit -m "testing git local clone"
[master (root-commit) 489f120] testing git local clone
 4 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test1.txt
 create mode 100644 test2.txt
 create mode 100644 test3.txt
 create mode 100644 test4.txt
[root@ip-172-31-9-43 src]#
```

Now let's clone the "src" to our destination folder i.e, "dest" as below

```
[root@ip-172-31-9-43 src]# ls -ld /tmp/dest
ls: cannot access /tmp/dest: No such file or directory
[root@ip-172-31-9-43 src]# git clone /tmp/src /tmp/dest
Cloning into '/tmp/dest'...
done.
[root@ip-172-31-9-43 src]# ls -ld /tmp/dest
drwxr-xr-x 3 root root 86 Jul 27 18:32 /tmp/dest
[root@ip-172-31-9-43 src]#
```

Let's do the modification in the destination folder and try to sync it from src as below.



Sync from src folder as follows:

```
[root@ip-172-31-9-43 src]# git status
On branch master
nothing to commit, working tree clean
[root@ip-172-31-9-43 src]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:29 test1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:29 test2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:29 test3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:29 test4.txt
[root@ip-172-31-9-43 src]# git pull /tmp/dest/
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 2 (delta 0), reused 0 (delta 0)
Unpacking objects: 100% (2/2), done.
From /tmp/dest
 * branch            HEAD       -> FETCH_HEAD
Updating 489f120..ef5224d
Fast-forward
 mytest1 | 0
 mytest2 | 0
 mytest3 | 0
 mytest4 | 0
 4 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 mytest1
 create mode 100644 mytest2
 create mode 100644 mytest3
 create mode 100644 mytest4
[root@ip-172-31-9-43 src]# ls -l
```

Branching, Merging and Tagging:

Branches:

Master branch is the default branch which will gets initialized when you create the repository and initialize it.

```
[root@ip-172-31-9-43 tmp]# mkdir mybranchrepo
[root@ip-172-31-9-43 tmp]# cd mybranchrepo/
[root@ip-172-31-9-43 mybranchrepo]# git init .
Initialized empty Git repository in /tmp/mybranchrepo/.git/
[root@ip-172-31-9-43 mybranchrepo]# touch test.txt
[root@ip-172-31-9-43 mybranchrepo]# git add .
[root@ip-172-31-9-43 mybranchrepo]# git commit -m "working with branches"
[master (root-commit) 8fb80f8] working with branches
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test.txt
[root@ip-172-31-9-43 mybranchrepo]# git branch
* master
[root@ip-172-31-9-43 mybranchrepo]# git checkout -b branch1
Switched to a new branch 'branch1'
[root@ip-172-31-9-43 mybranchrepo]# git branch
* branch1
  master
```

Let's check it out what data do we have in branch1 & master branch

```
[root@ip-172-31-9-43 mybranchrepo]# git branch
* branch1
  master
[root@ip-172-31-9-43 mybranchrepo]# touch mybranchdata{1..3}
[root@ip-172-31-9-43 mybranchrepo]# git status
On branch branch1
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        mybranchdata1
        mybranchdata2
        mybranchdata3

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-172-31-9-43 mybranchrepo]# git add .
[root@ip-172-31-9-43 mybranchrepo]# git commit -m "iam commiting in my branch branch1"
[branch1 902fca5] iam commiting in my branch branch1
 3 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 mybranchdata1
 create mode 100644 mybranchdata2
 create mode 100644 mybranchdata3
[root@ip-172-31-9-43 mybranchrepo]# ls
mybranchdata1  mybranchdata2  mybranchdata3  test.txt
[root@ip-172-31-9-43 mybranchrepo]# git checkout master
Switched to branch 'master'
[root@ip-172-31-9-43 mybranchrepo]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:43 test.txt
[root@ip-172-31-9-43 mybranchrepo]# git branch
  branch1
* master
[root@ip-172-31-9-43 mybranchrepo]#
```

Merging:

```
[root@ip-172-31-9-43 mybranchrepo]# git branch
  branch1
* master
[root@ip-172-31-9-43 mybranchrepo]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:43 test.txt
[root@ip-172-31-9-43 mybranchrepo]# git merge branch1
Updating 8fb80f8..902fca5
Fast-forward
 mybranchdata1 | 0
 mybranchdata2 | 0
 mybranchdata3 | 0
 3 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 mybranchdata1
 create mode 100644 mybranchdata2
 create mode 100644 mybranchdata3
[root@ip-172-31-9-43 mybranchrepo]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:49 mybranchdata1
-rw-r--r-- 1 root root 0 Jul 27 18:49 mybranchdata2
-rw-r--r-- 1 root root 0 Jul 27 18:49 mybranchdata3
-rw-r--r-- 1 root root 0 Jul 27 18:43 test.txt
[root@ip-172-31-9-43 mybranchrepo]# git branch
  branch1
* master
```

Tags:

Tags helps us to save the state of the previous things, before it created.

```
[root@ip-172-31-9-43 tmp]# mkdir mytagging
[root@ip-172-31-9-43 tmp]# cd mytagging/
[root@ip-172-31-9-43 mytagging]# ls -l
total 0
[root@ip-172-31-9-43 mytagging]# pw
[root@ip-172-31-9-43 mytagging]# pwd
/tmp/mytagging
[root@ip-172-31-9-43 mytagging]# git init .
Initialized empty Git repository in /tmp/mytagging/.git/
```

```
[root@ip-172-31-9-43 mytagging]# git init .
Initialized empty Git repository in /tmp/mytagging/.git/
[root@ip-172-31-9-43 mytagging]# touch test{1..4}.txt
[root@ip-172-31-9-43 mytagging]# git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        test1.txt
        test2.txt
        test3.txt
        test4.txt

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-172-31-9-43 mytagging]# git add .
[root@ip-172-31-9-43 mytagging]# git commit -m "working with git tag"
[master (root-commit) 64f968a] working with git tag
 4 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test1.txt
 create mode 100644 test2.txt
 create mode 100644 test3.txt
 create mode 100644 test4.txt
[root@ip-172-31-9-43 mytagging]# git tag v1.0
[root@ip-172-31-9-43 mytagging]# touch finaltest{1..4}.txt
[root@ip-172-31-9-43 mytagging]# git add .
[root@ip-172-31-9-43 mytagging]# git commit -m "testing tag option"
[master bff302b] testing tag option
 4 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 finaltest1.txt
 create mode 100644 finaltest2.txt
```

```
[root@ip-172-31-9-43 mytagging]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:52 finaltest1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 finaltest2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 finaltest3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 finaltest4.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 test1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 test2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 test3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 test4.txt
[root@ip-172-31-9-43 mytagging]#
```

Now let's revert back to the previous state i.e where we have our files test1.txt,test2.txt,test3.txt,test4.txt

```
[root@ip-172-31-9-43 mytagging]# git tag
v1.0
[root@ip-172-31-9-43 mytagging]# git log
commit bff302b7715dbcaac36fa203bc12c95df616691e (HEAD -> master)
Author: gituserid <shahan.aix@gmail.com>
Date:   Mon Jul 27 18:53:15 2020 +0000

    testing tag option

commit 64f968a81ce6b7e77ba05b279ed11898e4fe9079 (tag: v1.0)
Author: gituserid <shahan.aix@gmail.com>
Date:   Mon Jul 27 18:52:29 2020 +0000

    working with git tag
```

```
    working with git tag
[root@ip-172-31-9-43 mytagging]# git checkout 64f968a81ce6b7e77ba05b279ed11898e4fe9079
Note: switching to '64f968a81ce6b7e77ba05b279ed11898e4fe9079'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

  git switch -c <new-branch-name>

Or undo this operation with:

  git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 64f968a working with git tag
[root@ip-172-31-9-43 mytagging]# git checkout -b mynewrecovery
Switched to a new branch 'mynewrecovery'
[root@ip-172-31-9-43 mytagging]# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 27 18:52 test1.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 test2.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 test3.txt
-rw-r--r-- 1 root root 0 Jul 27 18:52 test4.txt
[root@ip-172-31-9-43 mytagging]# git branch
  master
* mynewrecovery
[root@ip-172-31-9-43 mytagging]#
```

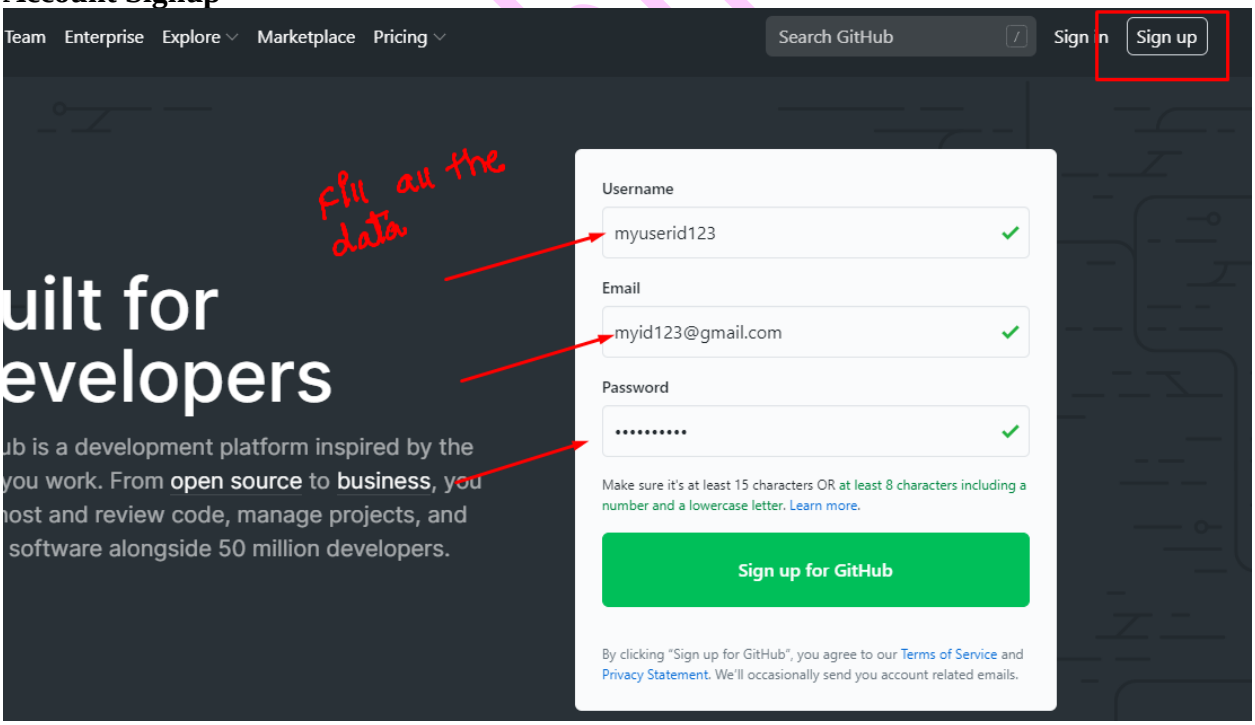
Git Log:

git log --pretty=oneline

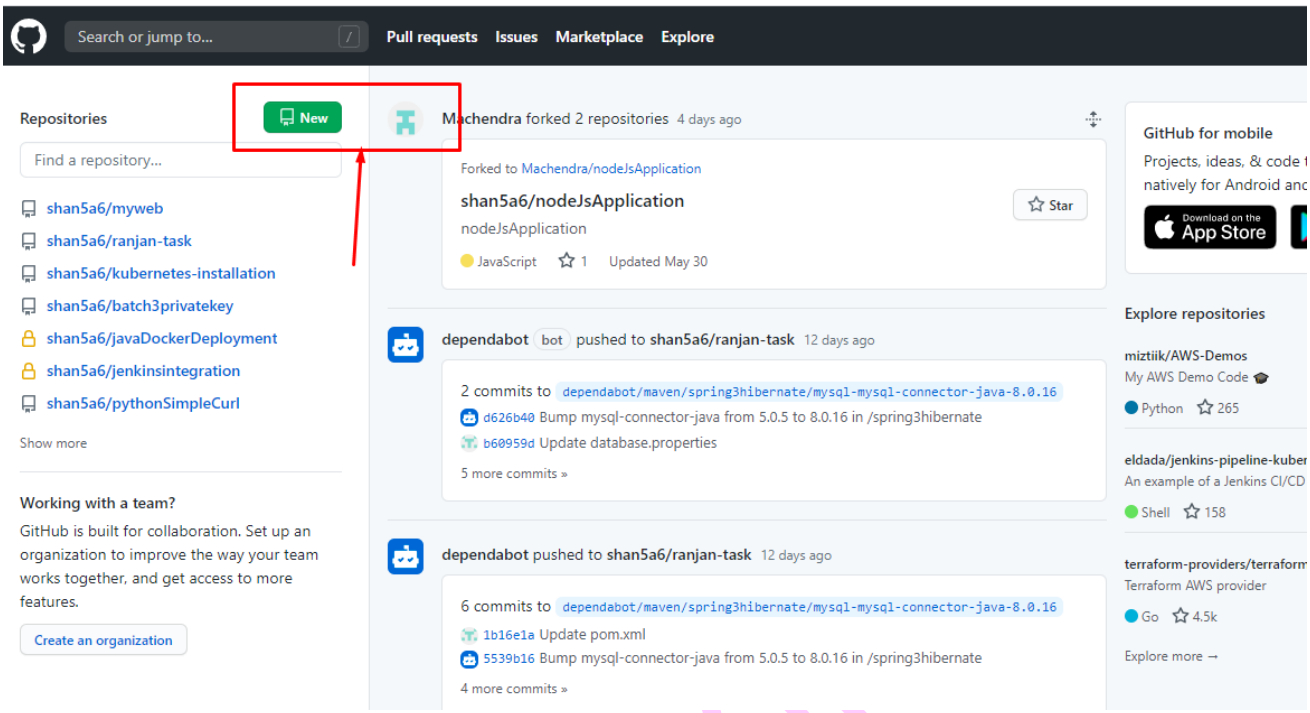
```
[root@ip-172-31-9-43 mytagging]# git log
commit 64f968a81ce6b7e77ba05b279ed11898e4fe9079 (HEAD -> mynewrecovery, tag: v1.0)
Author: gituserid <shahan.aix@gmail.com>
Date:   Mon Jul 27 18:52:29 2020 +0000

    working with git tag
[root@ip-172-31-9-43 mytagging]# git log --pretty=oneline
64f968a81ce6b7e77ba05b279ed11898e4fe9079 (HEAD -> mynewrecovery, tag: v1.0) working with git tag
[root@ip-172-31-9-43 mytagging]#
```

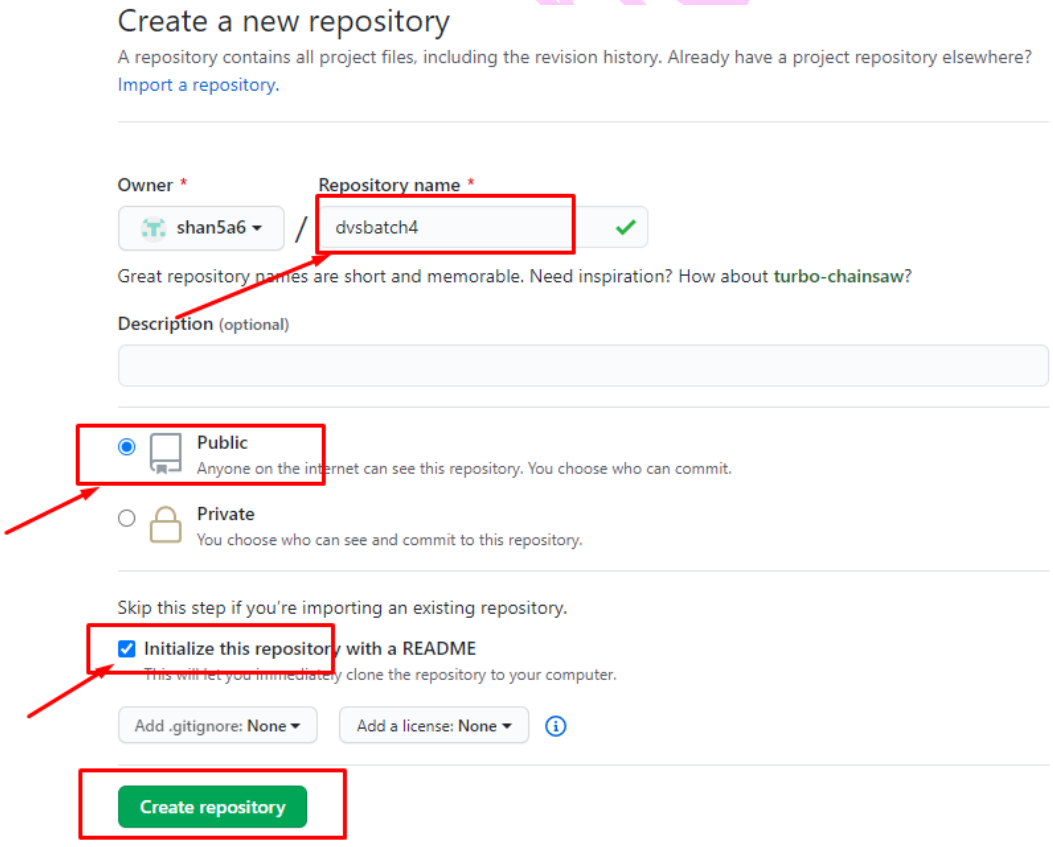
Working with Github :

Account Signup

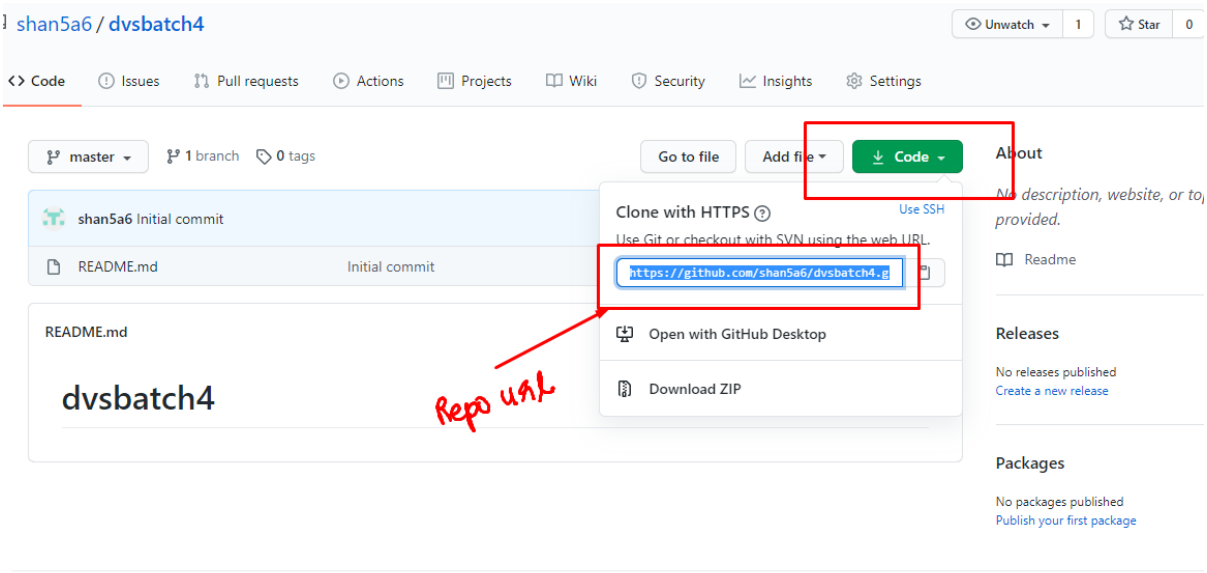


Creating a repository:





Cloning Repository to server :



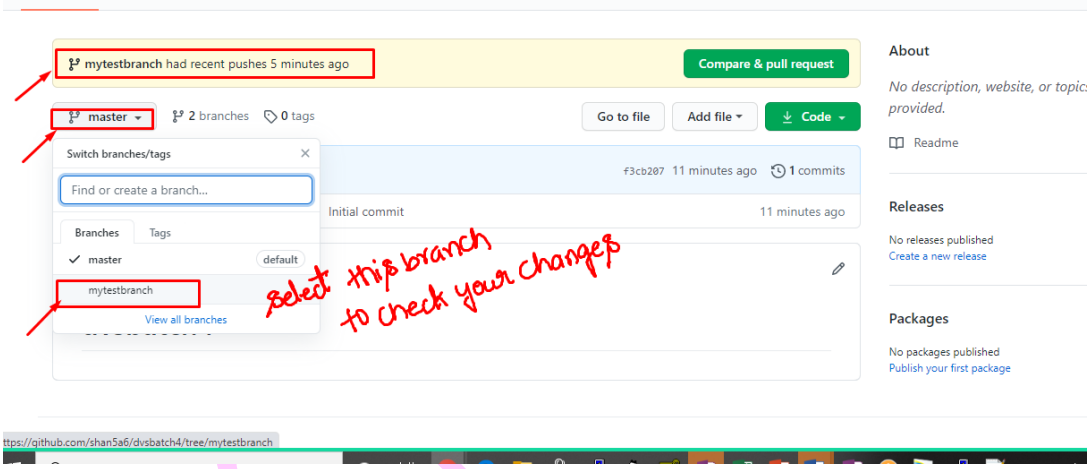

```
[root@gitserver tmp]# git clone https://github.com/shan5a6/dvsbatch4.git
Cloning into 'dvsbatch4'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
[root@gitserver tmp]#
```

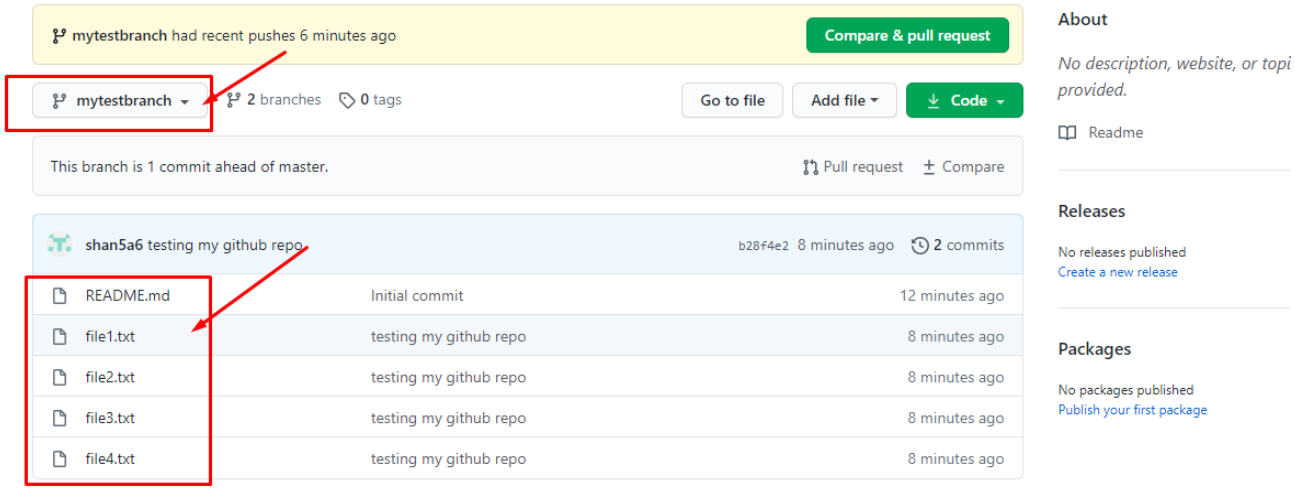
Pushing Data to Github under our branch :

```
[root@gitserver tmp]# git clone https://github.com/shan5a6/dvsbatch4.git
Cloning into 'dvsbatch4'...
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.
[root@gitserver tmp]# cd dvsbatch4/
[root@gitserver dvsbatch4]# ls -l
total 4
-rw-r--r-- 1 root root 11 Jul 28 03:05 README.md
[root@gitserver dvsbatch4]#
[root@gitserver dvsbatch4]# git checkout -b mytestbranch
Switched to a new branch 'mytestbranch'
[root@gitserver dvsbatch4]# touch file{1..4}.txt
[root@gitserver dvsbatch4]# ls -l
total 4
-rw-r--r-- 1 root root  0 Jul 28 03:06 file1.txt
-rw-r--r-- 1 root root  0 Jul 28 03:06 file2.txt
-rw-r--r-- 1 root root  0 Jul 28 03:06 file3.txt
-rw-r--r-- 1 root root  0 Jul 28 03:06 file4.txt
-rw-r--r-- 1 root root 11 Jul 28 03:05 README.md
[root@gitserver dvsbatch4]# git add .
[root@gitserver dvsbatch4]# git commit -m "testing my github repo"
[mytestbranch b28f4e2] testing my github repo
 4 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 file1.txt
 create mode 100644 file2.txt
 create mode 100644 file3.txt
 create mode 100644 file4.txt
```

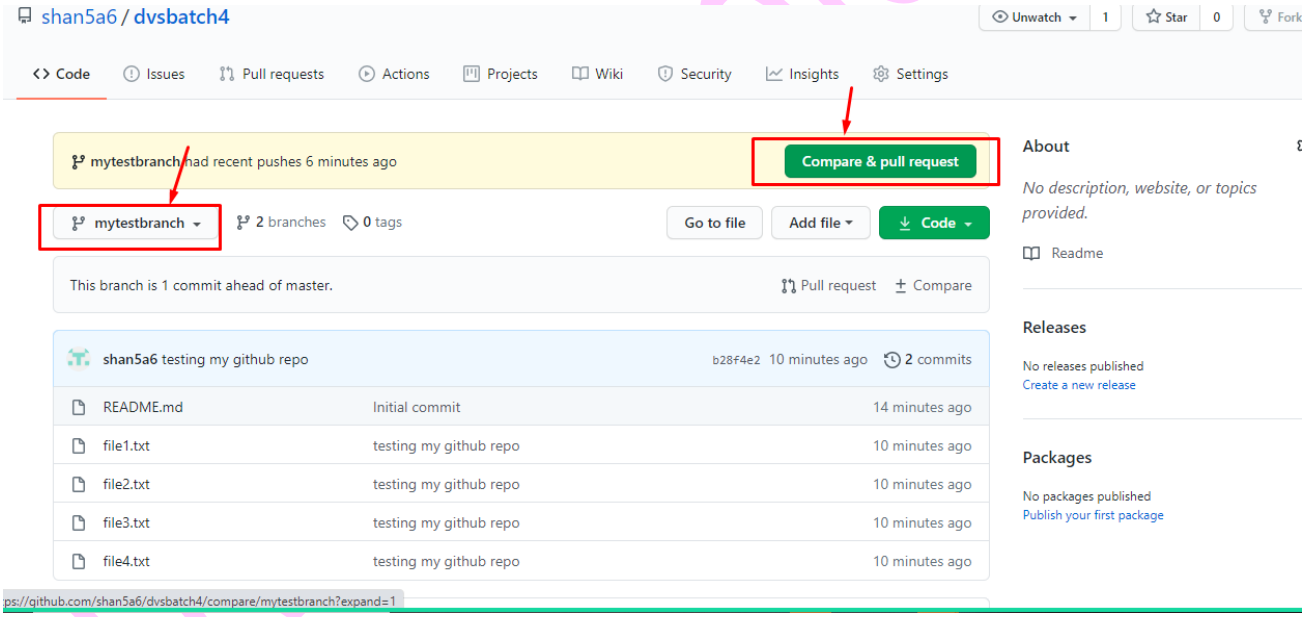
```
[root@gitserver dvsbatch4]# git branch
  master
* mytestbranch
[root@gitserver dvsbatch4]# git push origin mytestbranch
Username for 'https://github.com': shan5a6
Password for 'https://shan5a6@github.com':
Counting objects: 3, done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 294 bytes | 294.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'mytestbranch' on GitHub by visiting:
remote:      https://github.com/shan5a6/dvsbatch4/pull/new/mytestbranch
remote:
To https://github.com/shan5a6/dvsbatch4.git
 * [new branch]      mytestbranch -> mytestbranch
[root@gitserver dvsbatch4]#
```

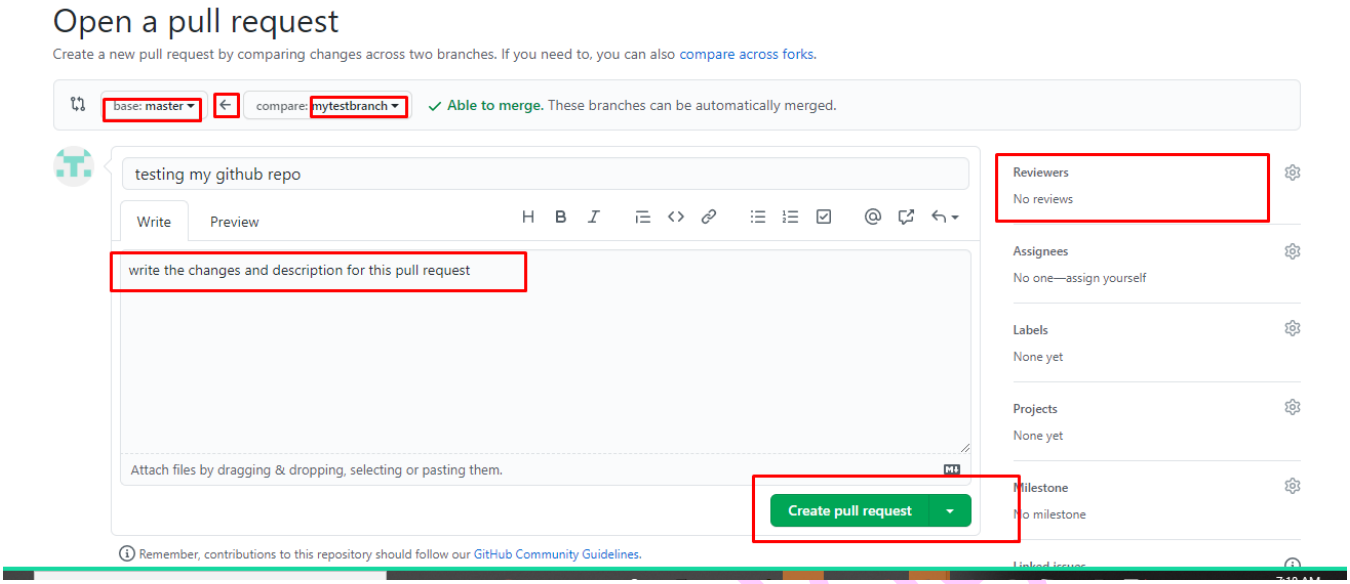
Verifying data in the github repository:



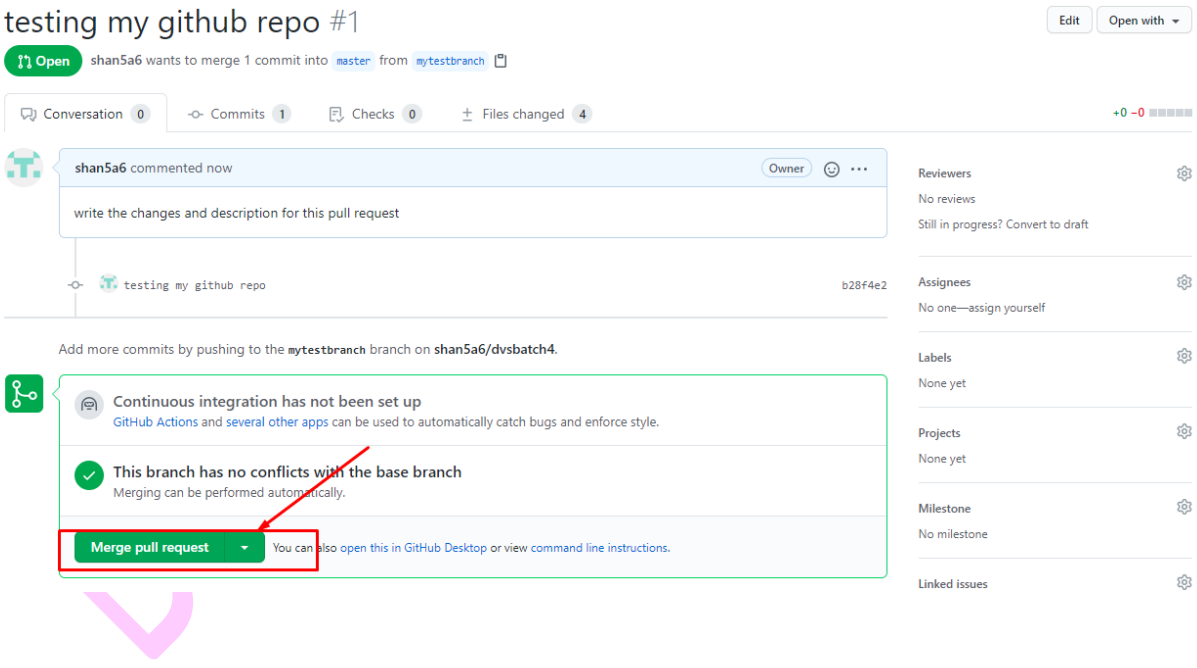


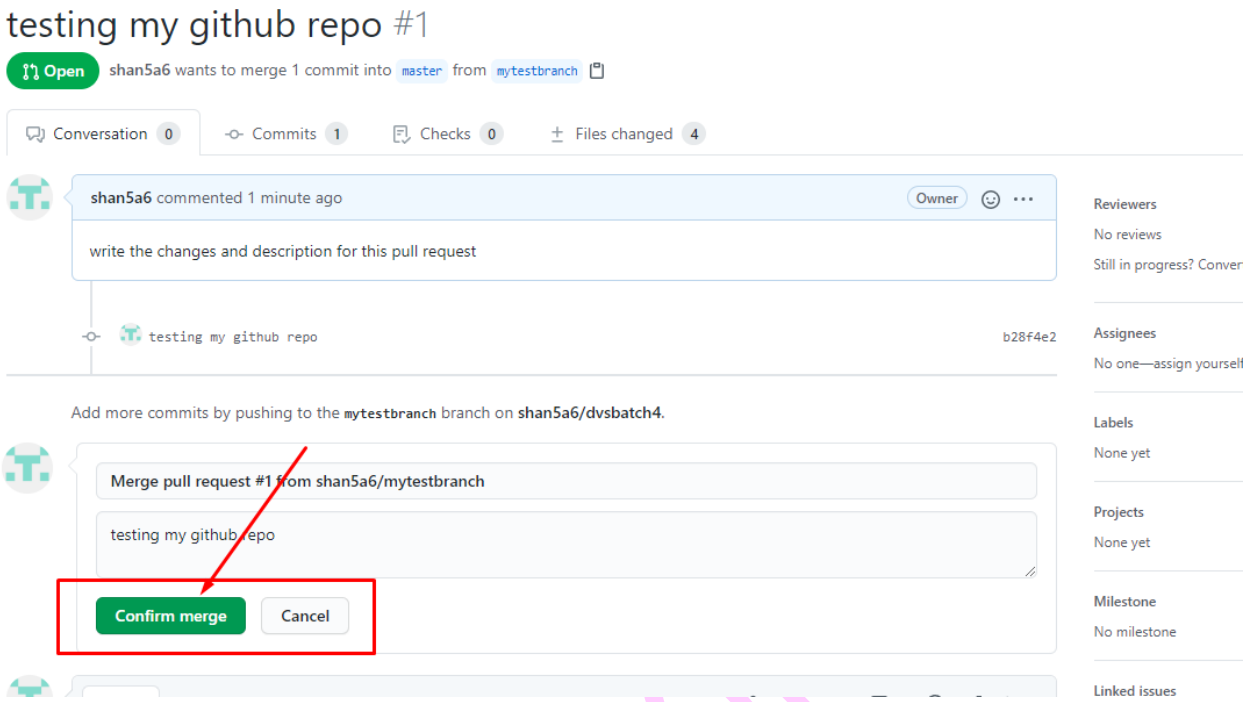
Raising a pull request :

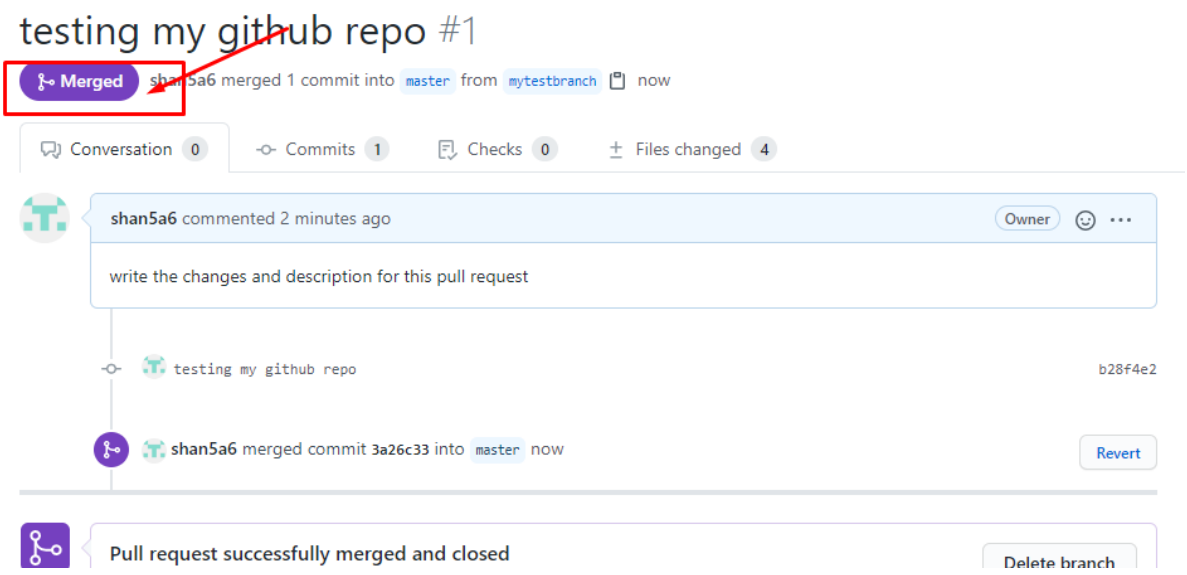


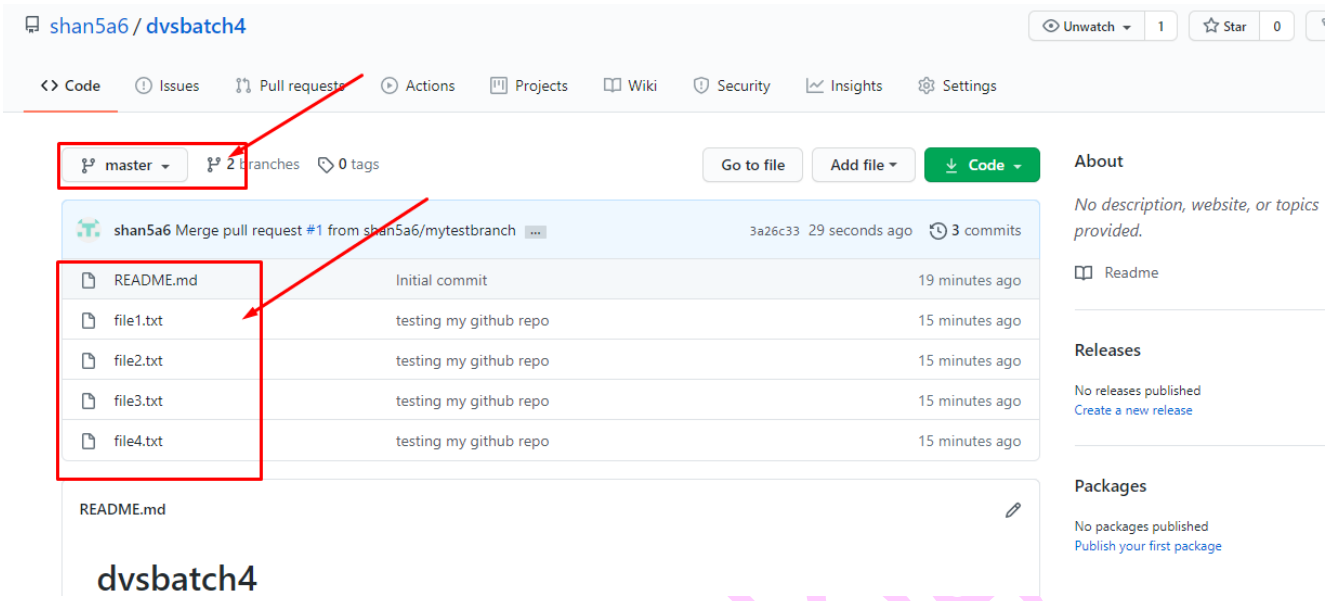


Merging my PR(Pull request):

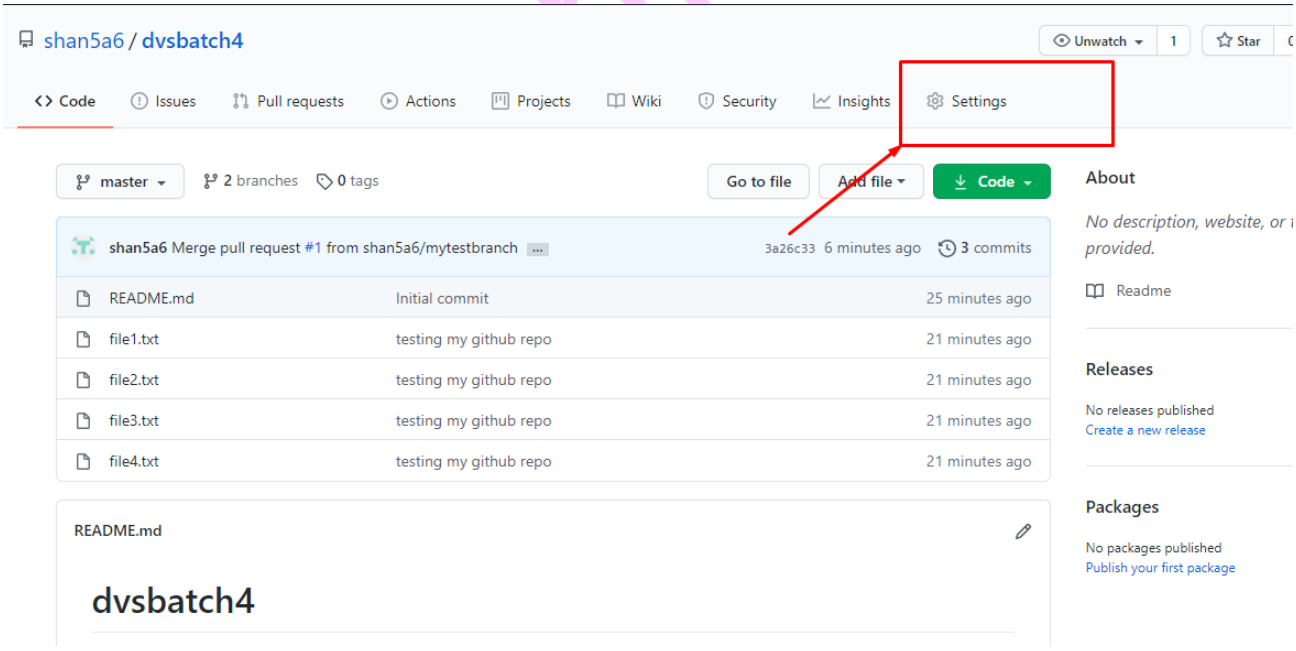



testing my github repo #1
Open
shan5a6 wants to merge 1 commit into master from mytestbranch
Conversation 0
Commits 1
Checks 0
Files changed 4
shan5a6 commented 1 minute ago
Owner
write the changes and description for this pull request
testing my github repo
b28f4e2
Add more commits by pushing to the mytestbranch branch on shan5a6/dvsbatch4.
Merge pull request #1 from shan5a6/mytestbranch
testing my github repo
Confirm merge
Cancel
Reviewers
No reviews
Still in progress? Conver
Assignees
No one—assign yourself
Labels
None yet
Projects
None yet
Milestone
No milestone
Linked issues

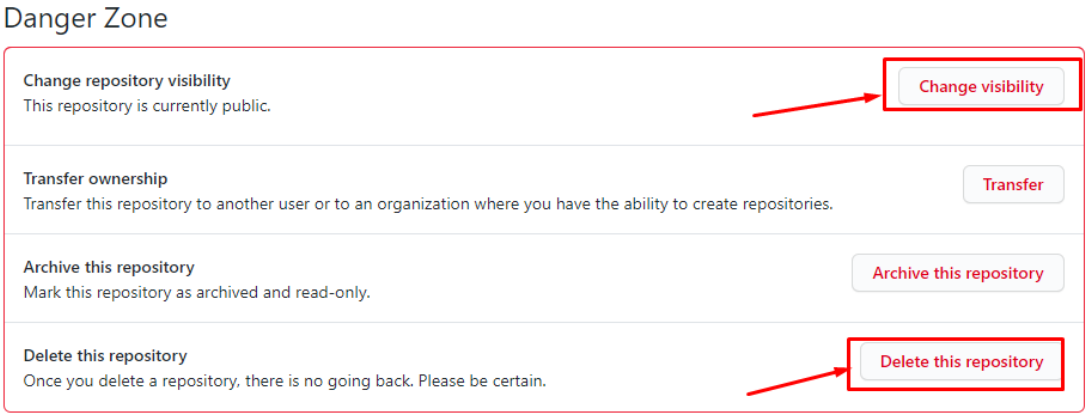

testing my github repo #1
Merged
shan5a6 merged 1 commit into master from mytestbranch now
Conversation 0
Commits 1
Checks 0
Files changed 4
shan5a6 commented 2 minutes ago
Owner
write the changes and description for this pull request
testing my github repo
b28f4e2
shan5a6 merged commit 3a26c33 into master now
Revert
Pull request successfully merged and closed
Delete branch

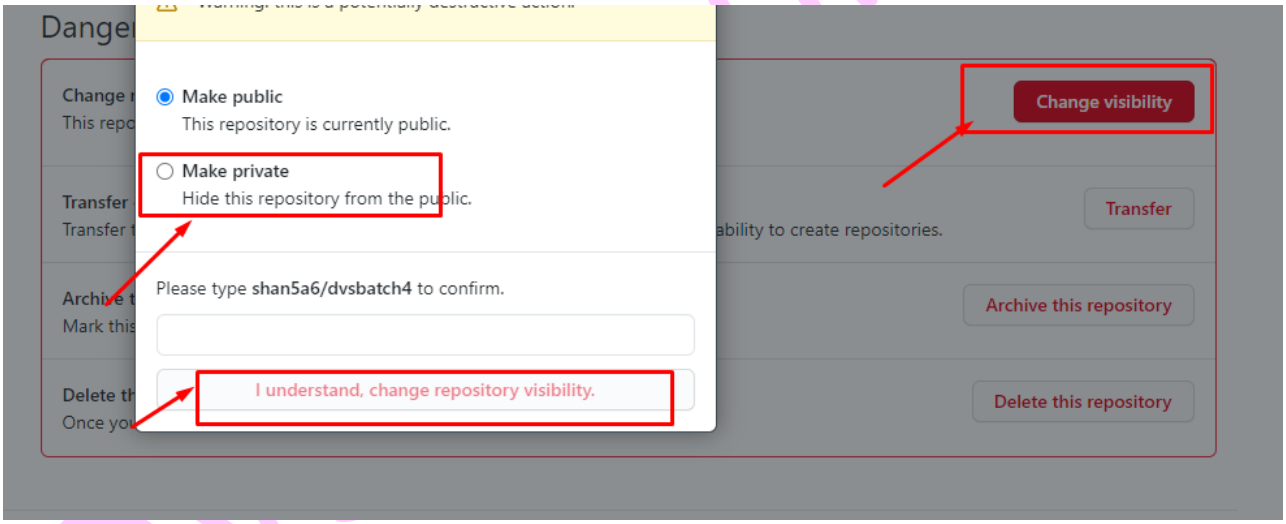


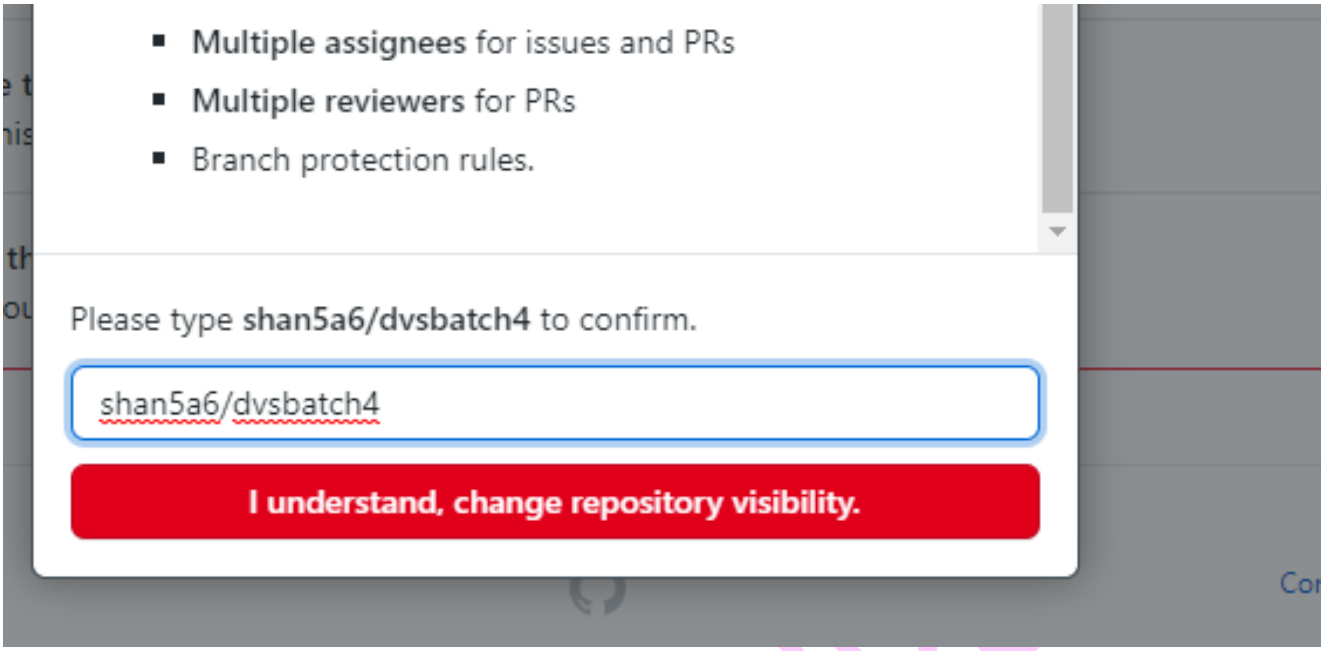
Making Private & Deleting the repository:

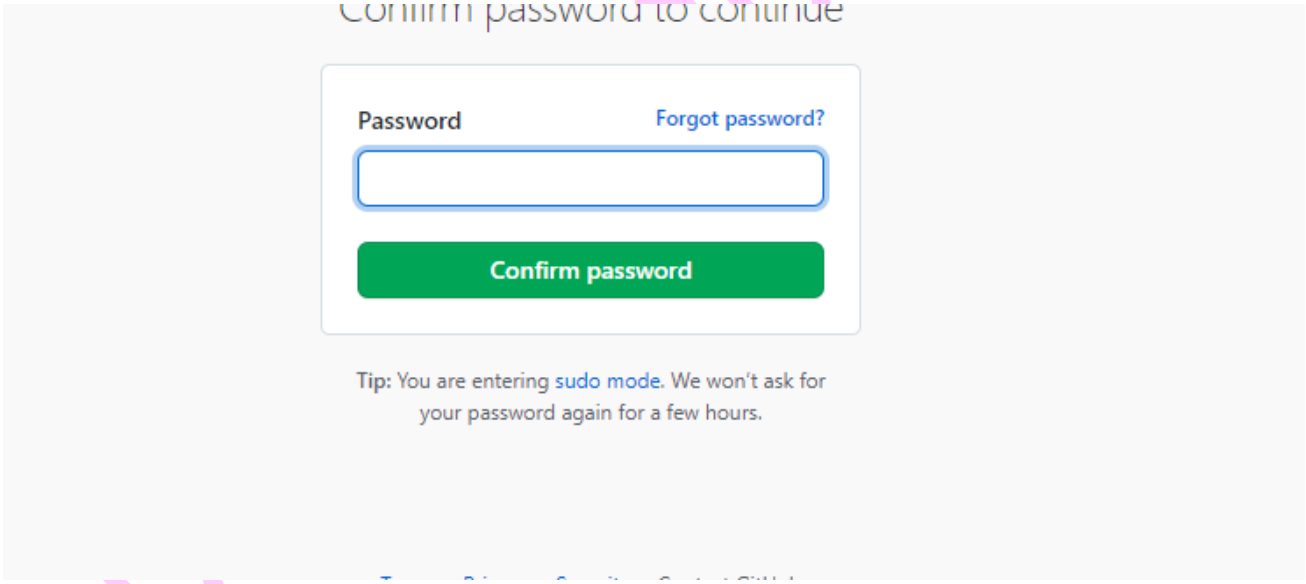


Scroll down the site






Multiple assignees for issues and PRs
Multiple reviewers for PRs
Branch protection rules.
Please type shan5a6/dvsbatch4 to confirm.
shan5a6/dvsbatch4
I understand, change repository visibility.


Confirm password to continue
Password
Forgot password?
Confirm password
Tip: You are entering sudo mode. We won't ask for your password again for a few hours.

Cloning git repo with ssh keys:

Generating keys:

You can use "puttygen" or use the server "ssh-keygen"

```
[root@git tmp]# ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:Pn8pKq1FY/8hLMeLfIUfbFKwOvrLnLdFKjdESh5vsN8 root@git
The key's randomart image is:
+---[RSA 2048]----+
|                 |
|          .      |
|        + .o     |
|       o B. .    |
|        S.++.    |
|       +oOo+=    |
|       o*.@=Eo   |
|      o=.X+*+.   |
|      .+X=++.    |
+----[SHA256]-----+
[root@git tmp]#
```

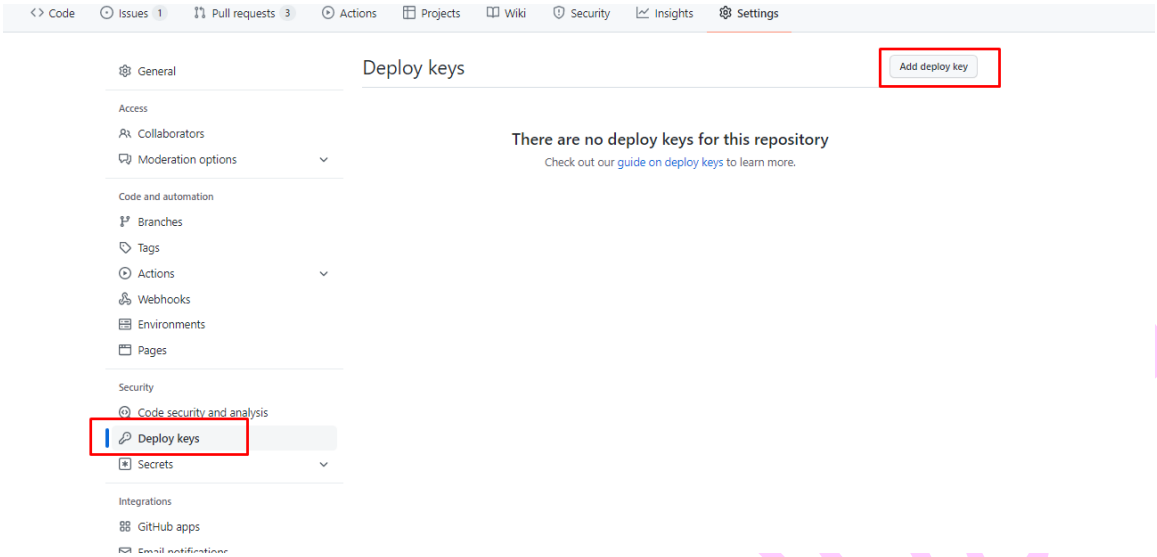
Public key:

```
[root@git tmp]# cat /root/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDXj0yDejL4ZY++Y26EPp/MtnwV18tJThqXGU//Yn64ww6AJwMlxXnnSwrODSpYAdu
hJp4bj5DGe5ZQS37jphobZ0nsrCgC7ckbb2mnxIRZKrAtro/wBUBP6drZ2xrfgvb1NEf6KD5Cw7cNtrbeMAYsudcNN8a/fK0KHfQqyJ
kUOK1lsU+PPMcIQaFuBR7UfkzgY4JMttPppYc4Sgn9mvYrMXq/opsiOBFi7pAyWPcSiVNJBXOVxRKcBl63AROD3PYy8Ueg0DzZpI0E0
Hae9RKRZ1+kSnrFbrePHwvLpEPjJm7/+BreoSi8JWzN+lNGQHxNlkrUGOzjUabmvedLDwqH root@git
```

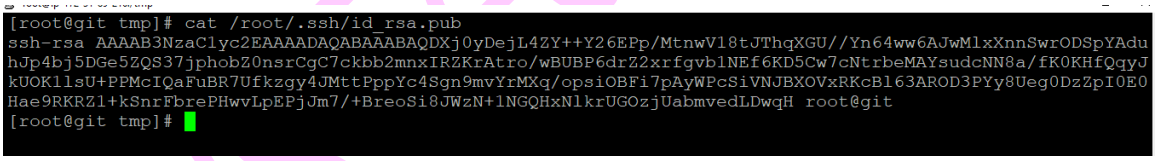
Private key:

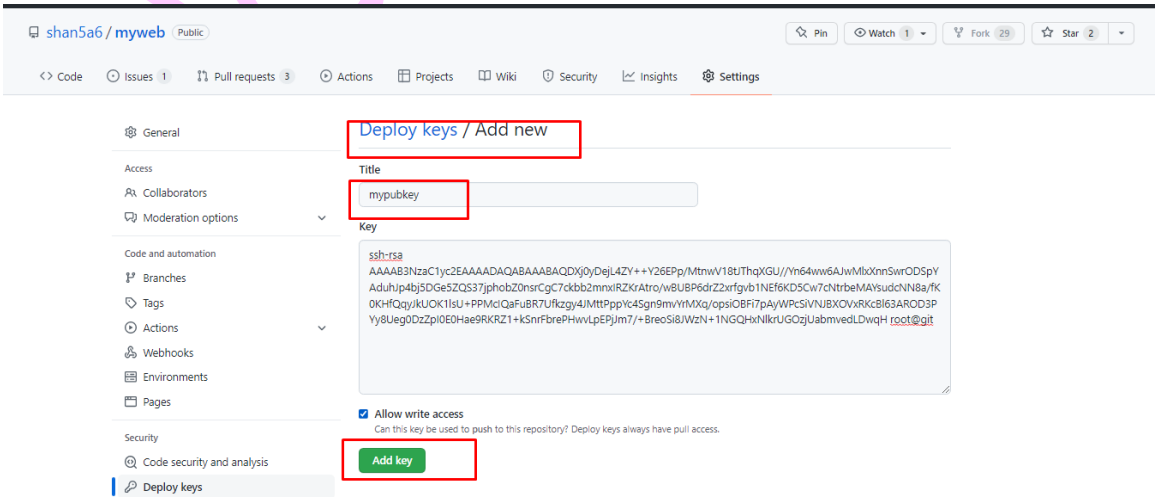
```
[root@git tmp]# cat /root/.ssh/id_rsa
-----BEGIN RSA PRIVATE KEY-----
MIIEpQIBAAKCAQEA149Mg3oy+GWPvmNuhD6fzLZ8FdfLSU4alxlP/2J+uMMOgCcD
JcV550sKzg0qWAHboSaeG4+QxnuWUEt+46YaG2dJ7KwoAu3JG29pp8SEWSqwLa6P
8AVAT+na2dsa34L29TRH+ig+QsO3Dba23jAGLLnXDTfGv3ytCh30KsiZFDitZbFP
jzzHCEGhbgUe1H5M4MuCTLbT6aWHOEoJ/Zr2KzF6v6KbIjgRYu6QMlj3EolTSQVz
lcUSnAZetwETg9z2MvFHoNA82aSNBNB2nvUSkWdfpEp6xW63jx8Ly6RD4yZu//ga
3qEovCVszftTRkB8TZZK1Bjs41Gm5r3nSw8KhwIDAQABAoIBAQCjK6UGjVTR9Mcn
nkrFLkZ2hthNDImkVswH/rAwqJU2NOjgFyfpyp8pdwOZ0BtyfQ2M4hei0z0LEfhJ
laxalJyEi95ImlS7StYFv4Nh7H8mpAqyucXZMZBqLaJtcM7ZzGA2YrntYdMnZNFH
Pz0T2ZSC/LYOGl+HCdBOrTfrvucphw0wTnmNTx8VLo/athti2gIc99CptjRiLgsq
J5u7ZKdqmboJkeQFYCxiQY0vjjFs/B522bgHkXbgOCfqLS85qreaTGdKHKO+yiuW
rcMMKqbiW9N5r4ItREMStloOv7+xAQ4OHHJ+beSVKL+BHvfS2hLebmAXoWuQjP5c
4UyqNSvxAoGBAPvkSUGbKaEC+nylfqgW654DXO014snsUcioIvlsYsIYQL4yAD4X
+JoM3qAKUKCF79UEq6dcECdmZrnF5drrYlARAV9SYG5fqlTHIWkuikTOX6fqOZO4
CwjqJZ3RqH4YR0fsVZz+ERALm9K1XsgHwXqYEZh9FXOt0gBrrRtu7a4JAoGBANsT
UTSHNrI4gFx7b+rxC6RWhSE/MCaeAg3gcEUkFMtGtVPGoXZliepzffmn8gpQe9rh
SVjf4g8scXQKZDzuWqY5sgQrbeSOLpDDL31t870YBc3WF4M/TPb4SQjOpyqV9W9L
hM5lFCpSf6jgRgKemRFiNAMFodQIByLHYPBgiRgPAoGBAMKM7a/IYfzESiesHqlB
GraurkVgi0ueRQSQKIMxHY4AIXFFOT68UPza19AQZ3m0OSr0MohO6QMlak4t9XyC
tfAPUloHTAezyKbwLnQIyC6gnu0YUWuG767pQOSGHHdX1SZN+UoKSa905+N0xkIF
C4DelyiJ49m29S3x/H/ly5nRAoGAF0koWoL8xljGHA5qyPgyGpevsub6gUBOS5dN
l6vMIgcOAuGcC++jBy6bd0voqDwBzjQgDbhOWPqKXKE2IlvbesurJlJPbfnG7VAx
3g0v2SuSglx9RlAVKDMf4DXHAvnJirjmNuH7kLwQIa0lA+ZDsttTV/bjSpxHleSH
YOV/jPUCgYEApnBzD7oWkrlLKu7KH5fbAZRlchbo9r83KMUAs9aZkFl2NQrwFk8b
bHVGtR8v6Grwg607z8Elq8Eo8AhHgvnTnPLcmABCFPyl8L+J4/lbINPILSrLxjqm
LnhEkus1h1Bjci43AQ0C1NO6bw85zGzLU214I8AvKSoZ99E1Y4B5Eqk=
-----END RSA PRIVATE KEY-----
```

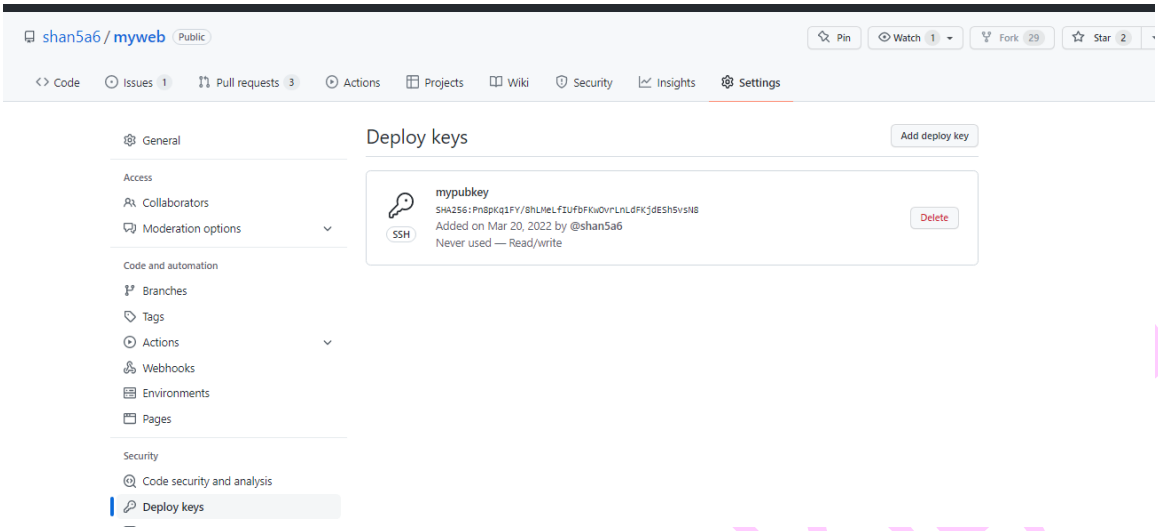
Configure publickey in the github:



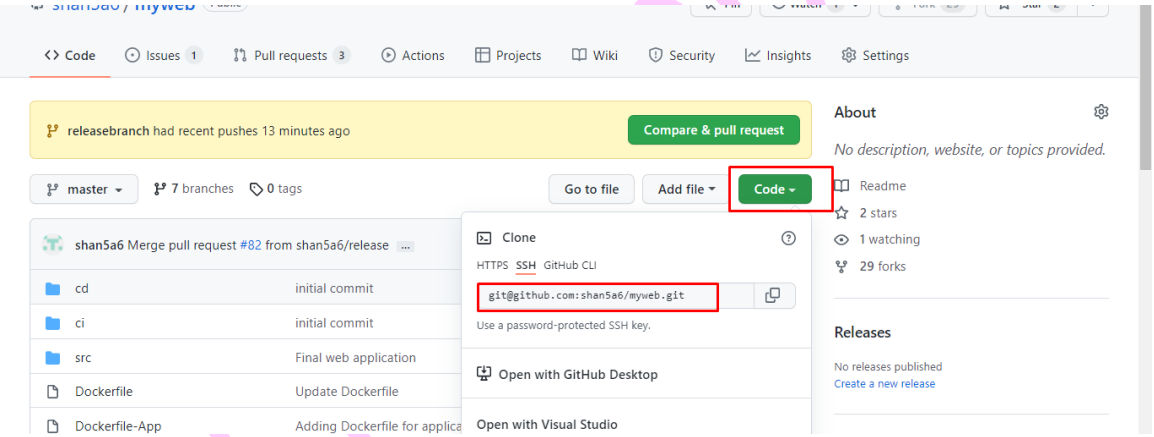
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDXj0yDejL4ZY++Y26EPp/MtnwV18tJThqXGU//Yn64ww6AJwMlxXnnSwrODSpYAduhJp4bj5DGe5ZQS37jphobZ0nsrCgC7ckbb2mnxIRZKrAtro/wBUBP6drZ2xrfgvb1NEf6KD5Cw7cNtrbeMAYsudcNN8a/fK0KHfQqyJkUOK1lsU+PPMcIQaFuBR7Ufkzgy4JMttPppYc4Sgn9mvYrMXq/opsiOBFi7pAyWPcSiVNJBXOVxRKcBl63AROD3PYy8Ueg0DzZpI0E0Hae9RKRZ1+kSnrFbrePHwvLpEPjJm7/+BreoSi8JWzN+1NGQHxNlkrUGOzjUabmvedLDwqH root@git







Now clone the repository with ssh:



```
root@ip-172-31-89-216:/tmp/myweb
[root@git tmp]# git clone git@github.com:shan5a6/myweb.git
Cloning into 'myweb'...
The authenticity of host 'github.com (140.82.114.3)' can't be established.
ECDSA key fingerprint is SHA256:p2QAMXNIC1TJYWeIOttrVc98/R1BUFWu3/LiyKgUfQM.
ECDSA key fingerprint is MD5:7b:99:81:1e:4c:91:a5:0d:5a:2e:2e:80:13:3f:24:ca.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'github.com,140.82.114.3' (ECDSA) to the list of known hosts.
remote: Enumerating objects: 400, done.
remote: Counting objects: 100% (142/142), done.
remote: Compressing objects: 100% (70/70), done.
remote: Total 400 (delta 99), reused 78 (delta 67), pack-reused 258
Receiving objects: 100% (400/400), 5.90 MiB | 31.00 MiB/s, done.
Resolving deltas: 100% (125/125), done.
[root@git tmp]# ls -l myweb/
total 40
-rw-r--r-- 1 root root  544 Mar 20 12:07 ansible.cfg
drwxr-xr-x 2 root root   25 Mar 20 12:07 cd
drwxr-xr-x 2 root root   25 Mar 20 12:07 ci
-rw-r--r-- 1 root root 1096 Mar 20 12:07 context.xml
-rw-r--r-- 1 root root  210 Mar 20 12:07 Dockerfile
-rw-r--r-- 1 root root  196 Mar 20 12:07 Dockerfile-App
-rw-r--r-- 1 root root 1181 Mar 20 12:07 Dockerfile-Base
-rw-r--r-- 1 root root   17 Mar 20 12:07 hosts
-rw-r--r-- 1 root root 1260 Mar 20 12:07 myweb.yml
-rw-r--r-- 1 root root 2758 Mar 20 12:07 pom.xml
-rw-r--r-- 1 root root   10 Mar 20 12:07 README.md
drwxr-xr-x 4 root root   30 Mar 20 12:07 src
-rw-r--r-- 1 root root    0 Mar 20 12:07 test1
-rw-r--r-- 1 root root  391 Mar 20 12:07 tomcat-users.xml
[root@git tmp]# cd myweb/
[root@git myweb]# git remote -v
```

```
[root@git myweb]# git remote -v
origin  git@github.com:shan5a6/myweb.git (fetch)
origin  git@github.com:shan5a6/myweb.git (push)
[root@git myweb]#
```