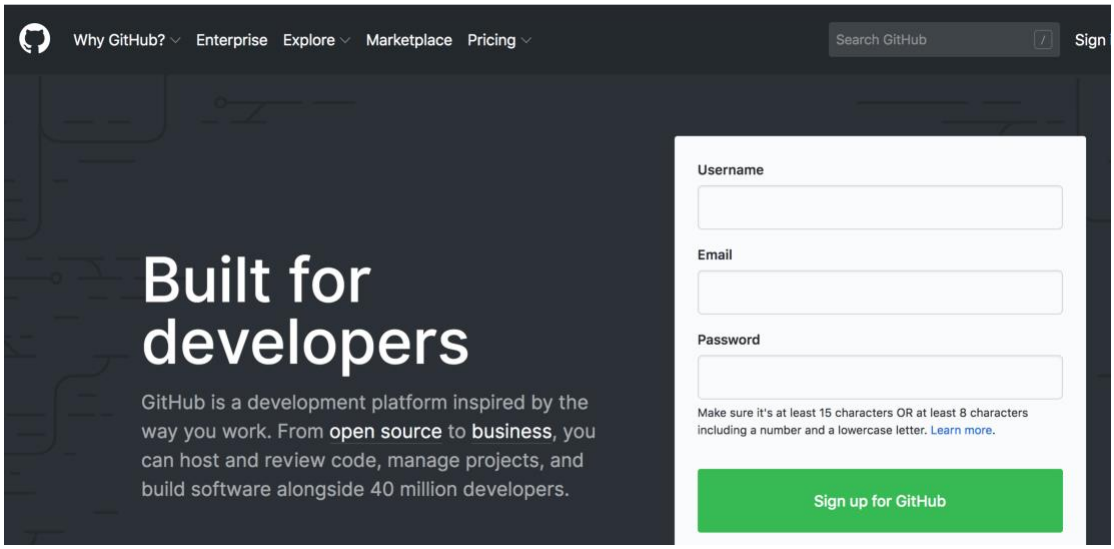
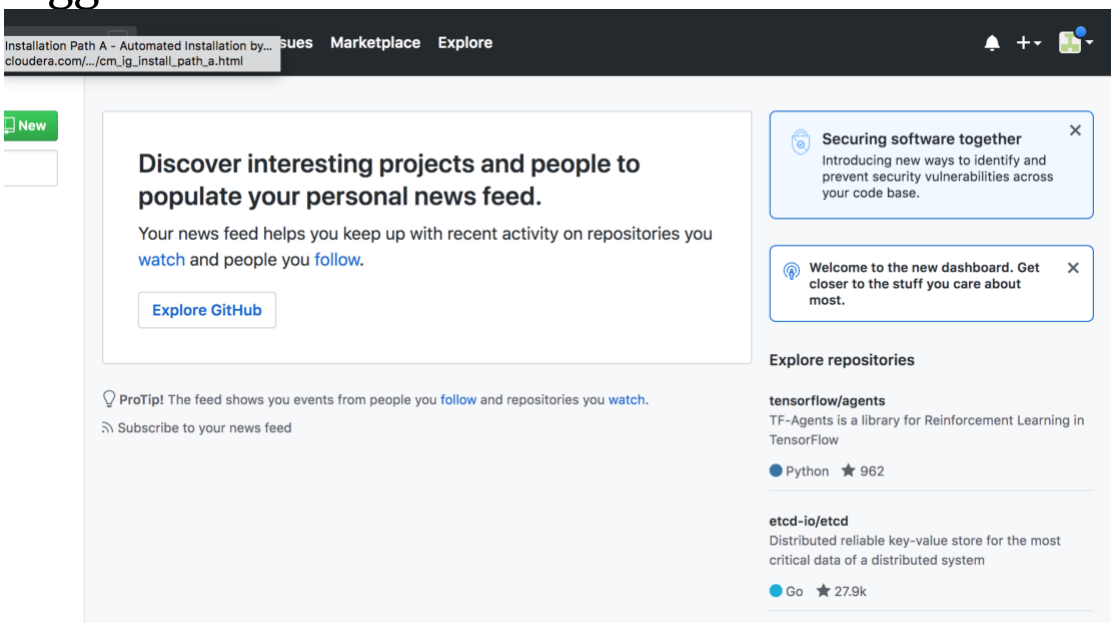
Exercise:Creating a GitHub Repository

Step 1: Go to github.com and signup for github account

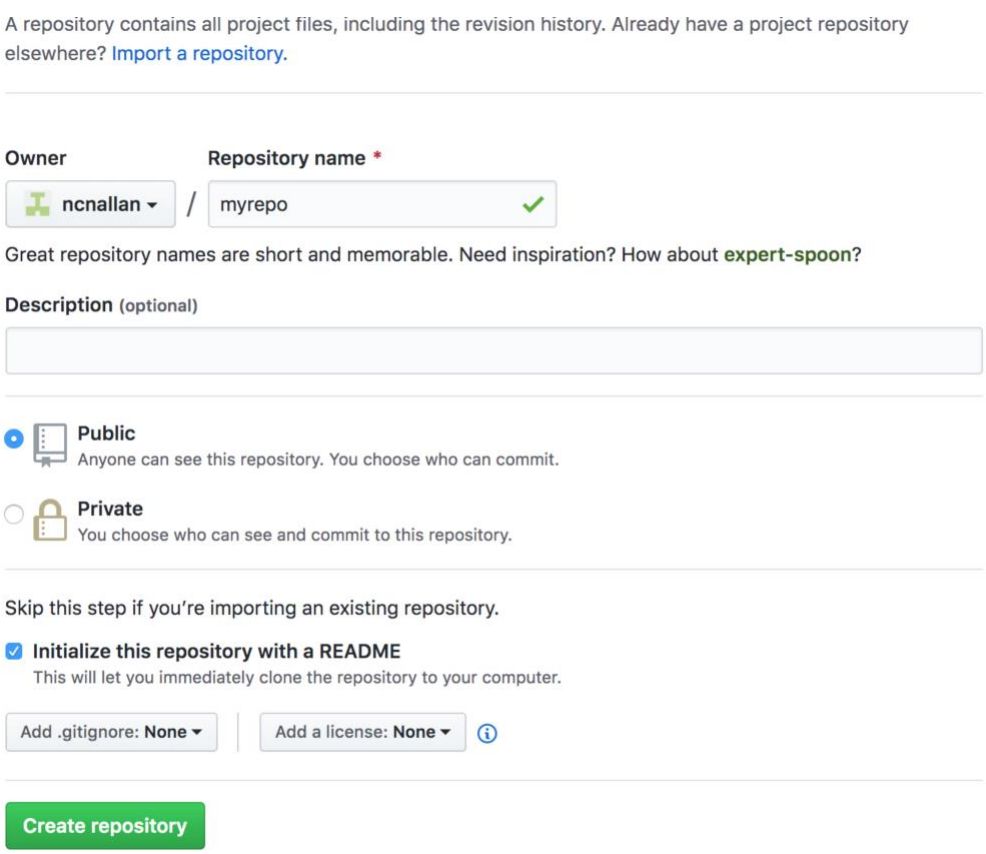


Step 2: You will see the below screen once logged in.

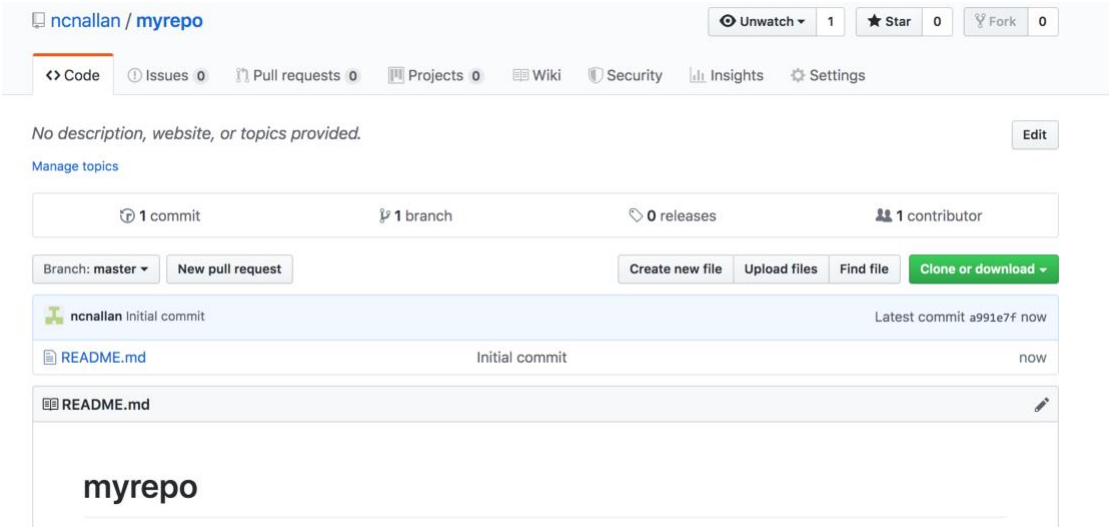


Step 3: Click the "+" sign at the top right corner and click New Repository.

Step 4: Enter a repository name of your choice, enter optional description, use the default selection Public(Free account) and click "**Initialize this repository with a README** " and Click **"Create Repository"**



Step 5: You will see the below empty project with a README file.



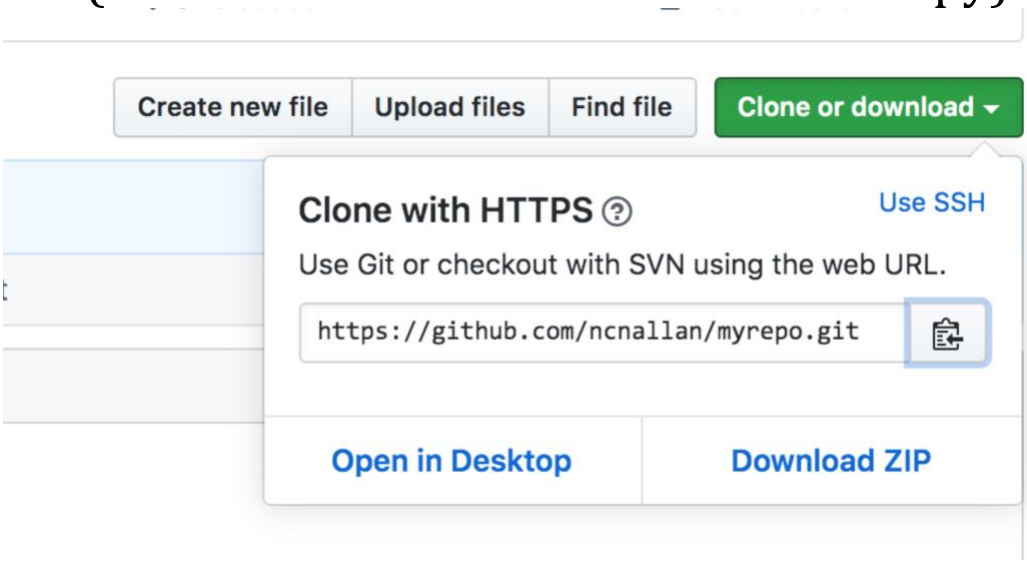
Step 6: Using the terminal create a directory in /home/devops names “myrepo”

```
mkdir myrepo
cd myrepo
```

Step 7: Initialize the repository

```
$ git init
```

Step 8: Connect your local repository to Git hub repository. Copy the github URL from the github site(Click clone or Download and click copy)

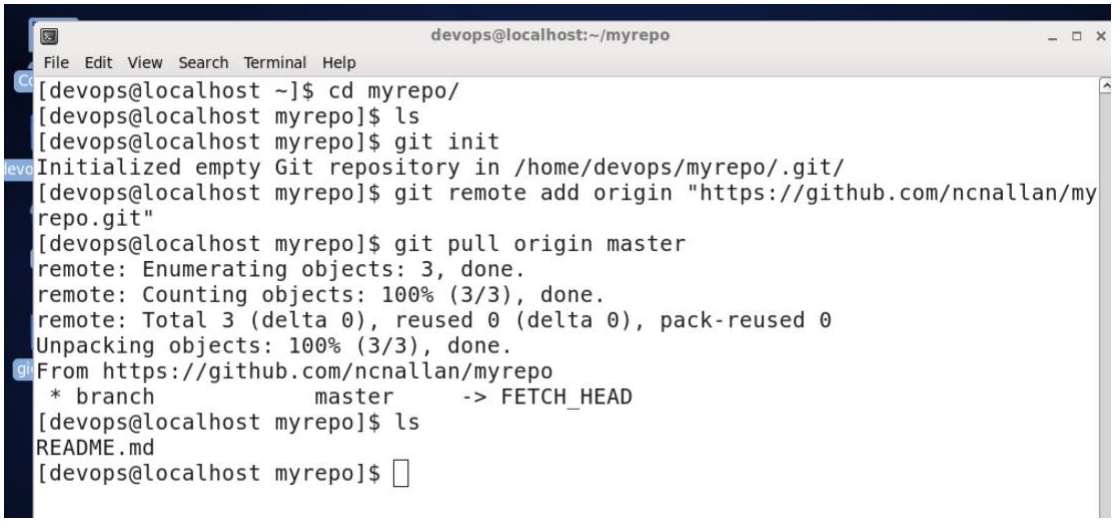


$ git remote add origin https://github.com/ncnallan/myrepo.git

$ git remote set-url origin https://**ncnallan**@github.com/ncnallan/myrepo.git
(add your github username before the github.com)

Step 9: Use git pull command to pull the data/files from github in to your local repository to synchronize.

$ git pull origin main

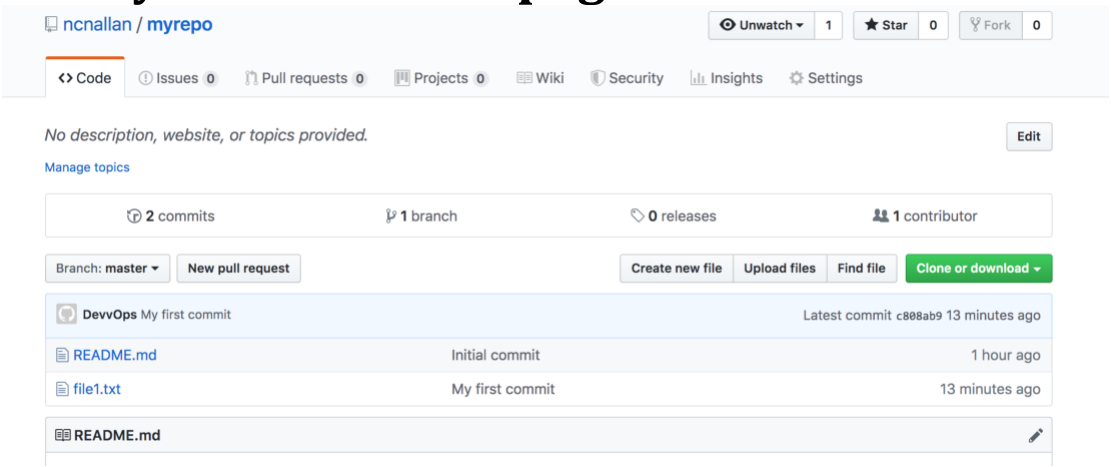


Step 10: Create a file in “myrepo” and add it to staging and local repo. Then push the changes to central repository in git hub. Enter the

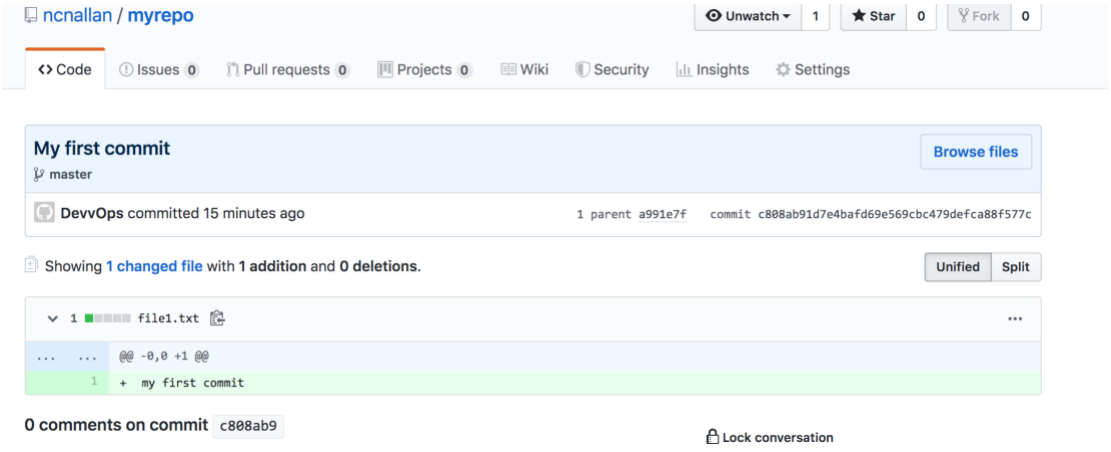
password of your github account when prompted

```
$ echo “First commit”> file1.txt
$ git add .
$ git commit –m “My first commit”
$ git push origin master
```

The file can be found in your github account after you refresh the page.

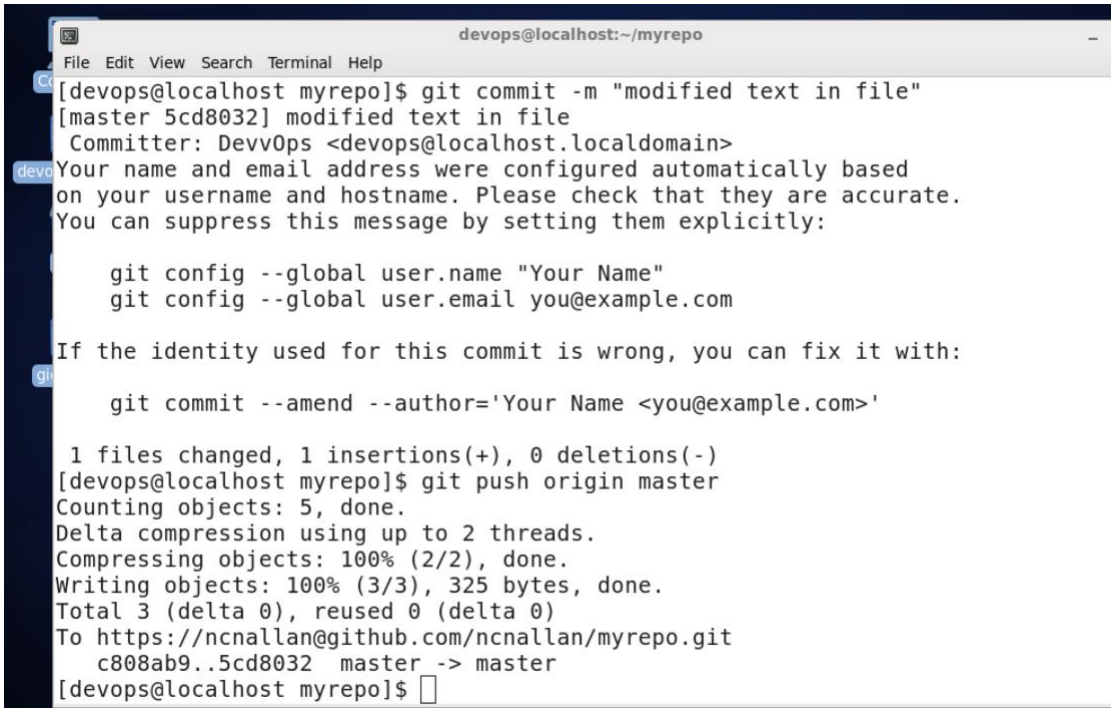


Click the comment against the file to see the difference between the versions of the file



Step 11: Modify the file in your local repo and again sync with cental repository and observe the differences in github

```
$ echo “new changes” >>file1.txt
$git add .
$git commit -m “modified text in file”
$ git push origin master
```



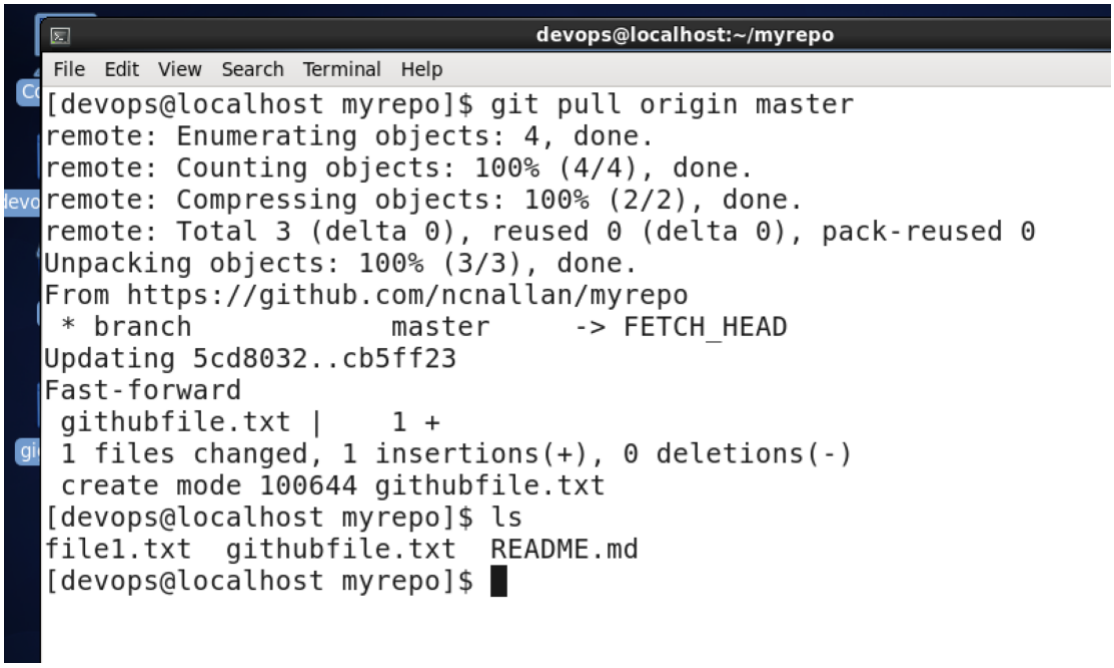
refresh the github page to see the differences between the uploads

Step 12: Add a new file in github and synchronize with the local repository
Click Create New File and add a name and content for the file. Click commit.

Step 13: Synchronize with local repository

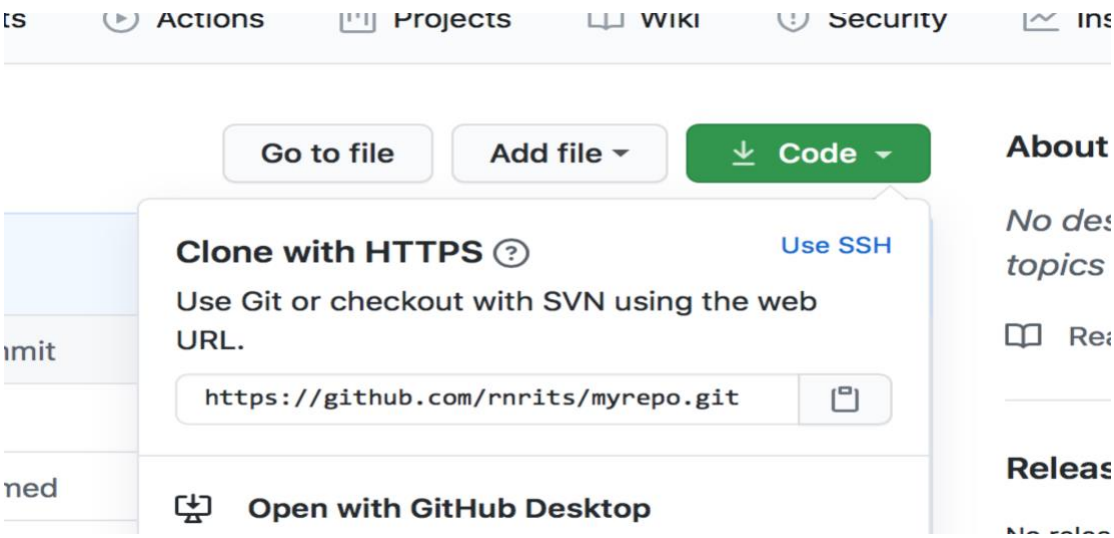
```
$ git pull origin master
```

$ ls



TO clone a new repo in the local machine

Step 1: Copy the github URL from the github site (Click Code Button and click copy the URL) and run the following command in git bash to configure your local repository to the central github repository



```
$ git clone
https://github.com/rnrits/myrepo.git

$ git remote set-url origin
https://rnrits@github.com/rnrits/myrepo.git
(add your github username before the
github.com)
```

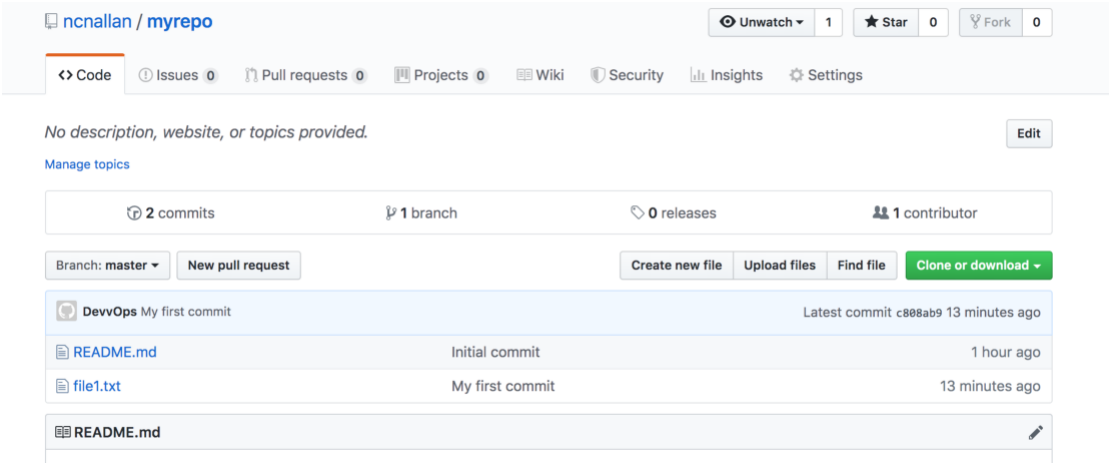
Step 2: Move to the myrepo directory and check the contents

```
$ cd mynewrepo
$ ls
```

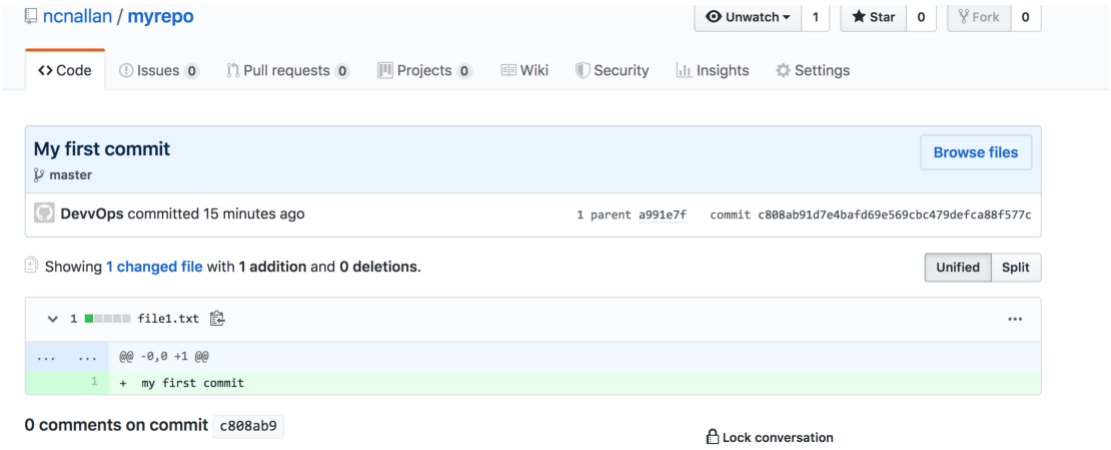
Step 3: Create a file in “myrepo” and add it to staging and local repo. Then push the changes to central repository in git hub. Enter the Personal token of your github account when prompted

```
$ echo “First commit”> file1.txt
$ git add .
$ git commit –m “My first commit”
$ git push
```

The file can be found in your github account after you refresh the page.

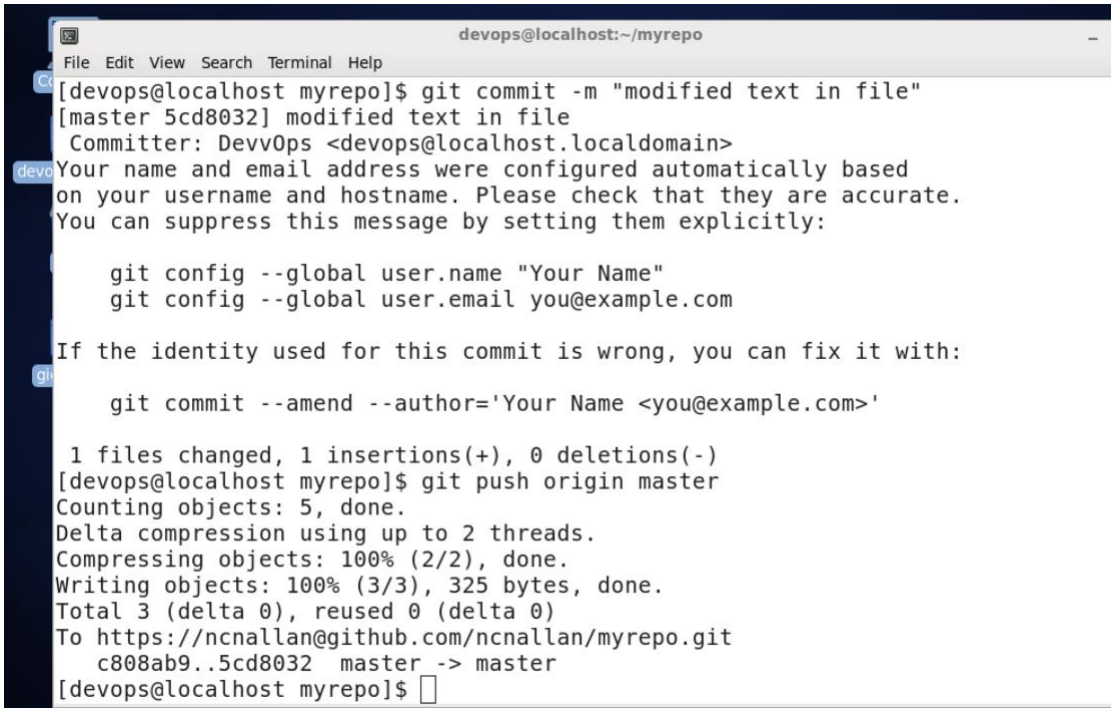


Click the comment against the file to see the difference between the versions of the file



Step 4: Modify the file in your local repo and again sync with central repository and observe the differences in github

```
$ echo “new changes” >>file1.txt
$git add .
$git commit -m “modified text in file”
$ git push
```



refresh the github page to see the differences between the uploads

Step 5: Add a new content to the file in github and synchronize with the local repository
Click commit.

Step 6: Synchronize with local repository

```
$ git pull
$ ls
```

Step 7: Renaming files in Git

```
$ git mv file1 file2
$ git add .
$ git commit -m “commit message”
$ git push
```

Step 8: Deleting a file

```
$ git rm file1
$ git add .
$ git commit -m “commit message”
$ git push origin main
```
The file will be deleted from the central repository also

Step 9: Finding the differences between a file in local repo and github central repo

```
$ git fetch origin main
$ git diff origin/main -- file3.txt
```