

1)Install git.

- To install git CMD ----- git init
- After these command Initialized empty Git repository in local machine.
- To see the repository CMD---- ls -a.

```
ramee@Ramesh MINGW64 ~/rameefile (master)
$ git init
Initialized empty Git repository in c:/Users/ramee/rameefile/.git/

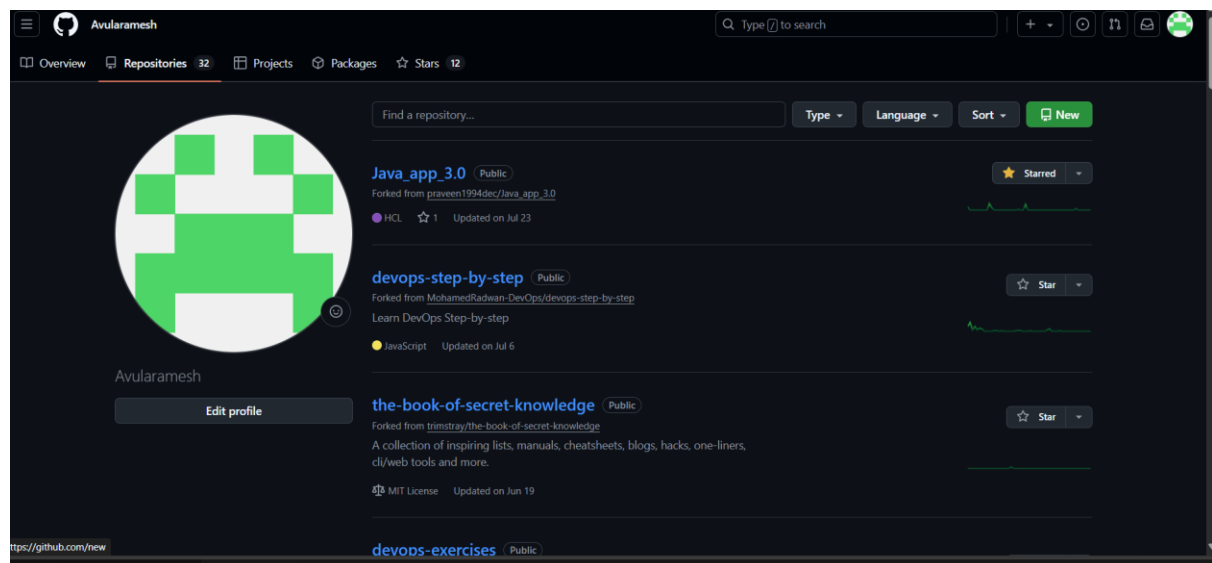
ramee@Ramesh MINGW64 ~/rameefile (master)
$ ls -a
./ ../ .git/

ramee@Ramesh MINGW64 ~/rameefile (master)
$ |
```

2)Create a repo in github with README.md and .ignore file.

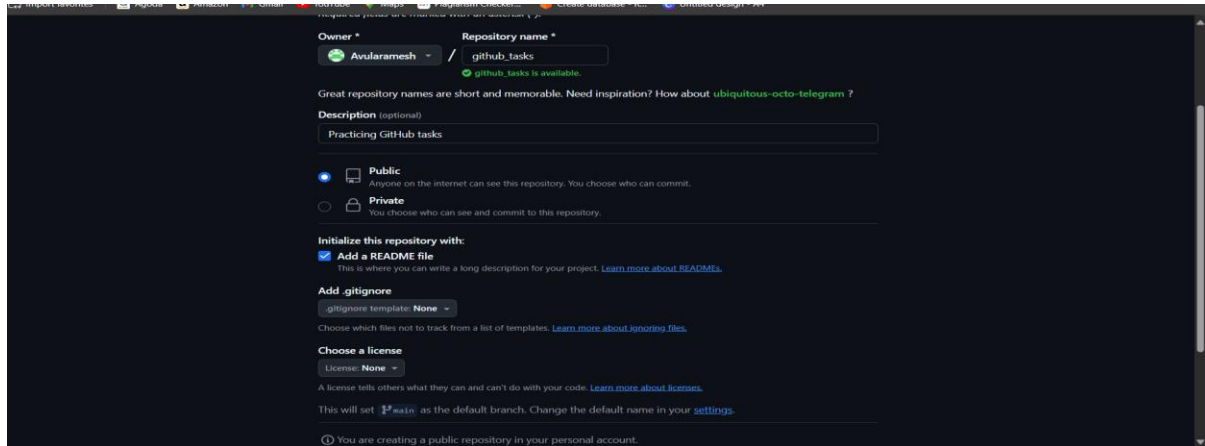
First we have Login github account and click on the repositories.

You will see the below interface and click on the new.



- Next you will seen the below interface.
- There you have to give repository name ---- what you want give
- Description is Optional.
- Account privacy also select your optional Like ---- Public or Private.
- The below you select the readme file
- Next click on create repository.

- The repo in github with README file created.
- This `README.md` file gives a clear structure and helps anyone understand your project quickly.



3) Clone the created repo to local.

- Go to the github repo and you will see in code option with green colour.
- Click on that and copy the url.
- Go to the git bash and enter the below command you will download the github repo to local machine.
- Check repo downloaded or not with ls command.

```
ramee@Ramesh MINGW64 ~/rameefile (master)
$ git clone git@github.com:Avularamesh/github_tasks.git
Cloning into 'github_tasks'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.

ramee@Ramesh MINGW64 ~/rameefile (master)
$ ls
github_tasks/

ramee@Ramesh MINGW64 ~/rameefile (master)
$ |
```

4) Create two files in local repo.

- To create the files you can use below command.
- CMD--- touch file.txt file1.txt
- The files are created.

```
ramee@Ramesh MINGW64 ~/rameefile (master)
$ touch file.txt file1.txt

ramee@Ramesh MINGW64 ~/rameefile (master)
$ ls
file.txt  file1.txt  github_tasks/

ramee@Ramesh MINGW64 ~/rameefile (master)
$ |
```

5) Commit two files and push to central Repository.

First you have to create the files.

Then enter these command CMD--- git add

Next CMD---- git commit -m "message"

```
ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git add file1.txt file2.txt

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

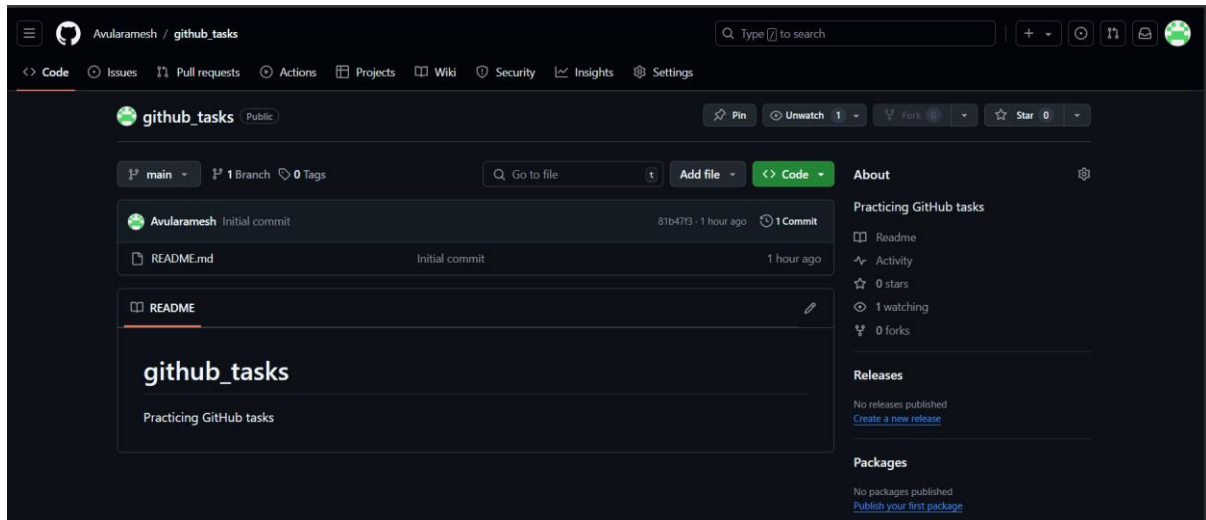
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   file1.txt
    new file:   file2.txt

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git commit -m " i am committing the two files"
[main d1635c7] i am committing the two files
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file1.txt
create mode 100644 file2.txt
```

Before push use these command -- git remote add origin <repository-url>

Before you need to check the remote repo there is any files are there or not.

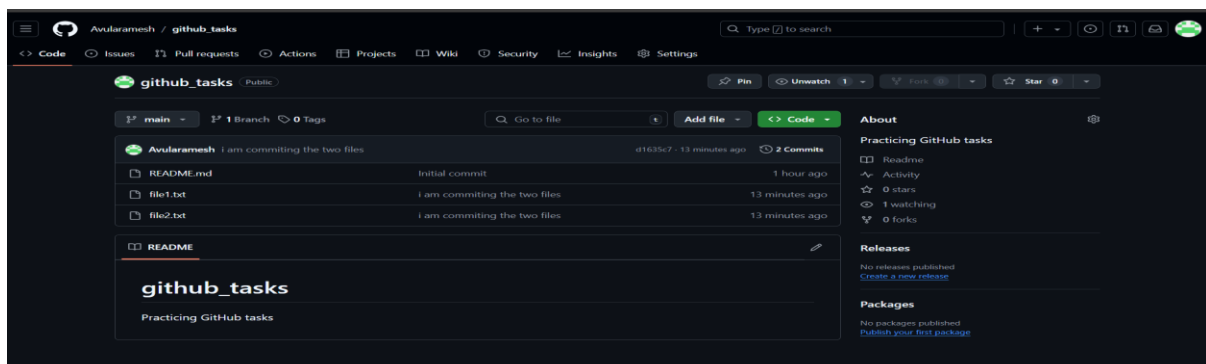
In the below image now not yet add the files.



Now enter the Cmd— git push

```
ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
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), pack-reused 0
To github.com:Avularamesh/github_tasks.git
81b47f3..d1635c7  main -> main
```

Once refresh the remote repo you will see in two file what we are pushing in local remote.



6) Create a branch in local and create a sample file and push to central.

```
ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git branch Devlop

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git branch
  Devlop
* main

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git checkout Devlop
Switched to branch 'Devlop'

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git branch
* Devlop
  main

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ touch Devops.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
```

7) Create a branch in github and clone that to local.

- To create Branch CMD----- git branch <branch name>
git branch --- to list the branches and shown current branch.
- git checkout <branchname>
- Create file CMD---- touch <filename>

```
ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git branch Devlop

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git branch
  Devlop
* main

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (main)
$ git checkout Devlop
Switched to branch 'Devlop'

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git branch
* Devlop
  main

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ touch Devops.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
```

To push Local to remote CMD--- git push origin <branch name>

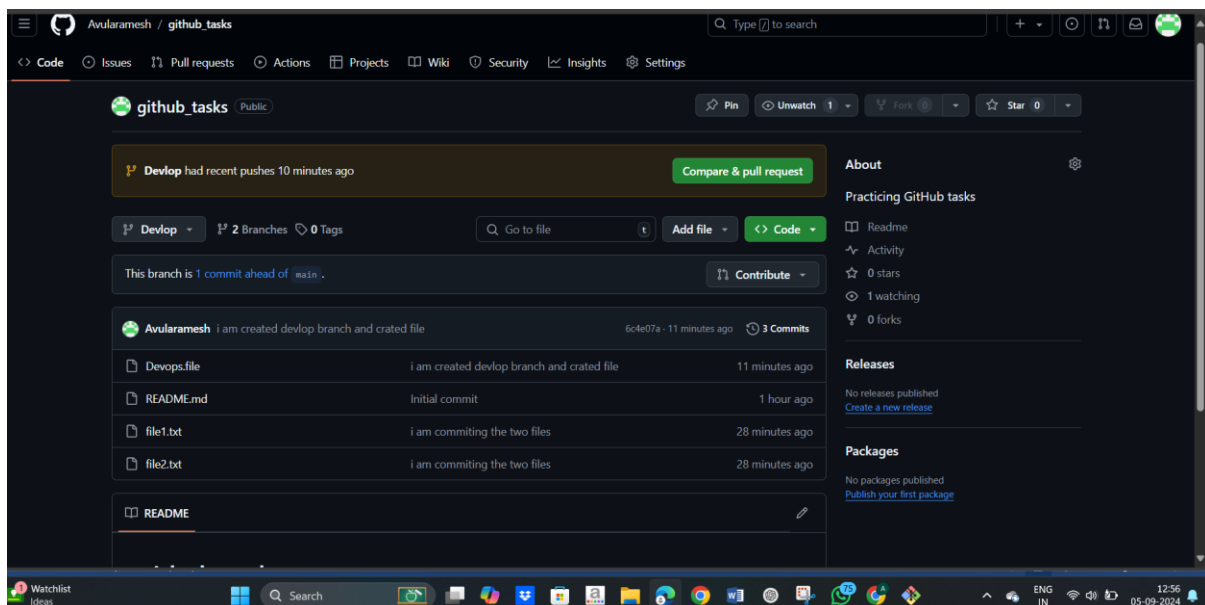
```
ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git add .

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git commit -m "i am created devlop branch and crated file"
[Devlop 6c4e07a] i am created devlop branch and crated file
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Devops.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git push origin Devlop
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 307 bytes | 307.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'Devlop' on GitHub by visiting:
remote:      https://github.com/Avularamesh/github_tasks/pull/new/Devlop
remote:
To github.com:Avularamesh/github_tasks.git
 * [new branch]      Devlop -> Devlop

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ |
```

- Once refresh the remote repo you will see the branch and file.
- Here one rule is there you create any branch from previous branch what are file have current branch that all files moved to the new branch.



8) Merge the created branch with master in git local.

I am in the Develop Branch there I am creating the two files and there to move the master branch.

```
ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ ls
Devops.file  README.md  file1.txt  file2.txt

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ touch text.file text1.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git add .

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git commit -m "i am committed the text.files"
[Devlop 28e14c7] i am committed the text.files
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 text.file
 create mode 100644 text1.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ ls
Devops.file  README.md  file1.txt  file2.txt  text.file  text1.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (Devlop)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 2 commits.
  (use "git push" to publish your local commits)
```

There I am using the command is ----- git merge <Devlop>

After these command you will see the files.

```
ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (master)
$ ls
Devops.file  README.md  file1.txt  file2.txt

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (master)
$ git merge Devlop
Merge made by the 'ort' strategy.
 text.file | 0
 text1.file | 0
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 text.file
 create mode 100644 text1.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (master)
$ ls
Devops.file  README.md  file1.txt  file2.txt  text.file  text1.file

ramee@Ramesh MINGW64 ~/rameefile/ramesh/github_tasks (master)
$
```

- 9) Merge the created branch with master in github by sending a pull request.
- 10) create a file in local and send that to branch in github.
- 11) clone only a branch from github to local.
- 12) create a file with all passwords and make that untrackable with git.
- 13) make a commit and make that commit reset without saving changes.
- 14) Revert a committed commit to the older version.
- 15) push a file to stash without saving the changes and work on another file.
- 16) undo the stash file and start working on that again.
- 17) generate a ssh-keygen and configure into github.
- 18) configure webhooks to github.
- 19) basic understanding of .git file.
- 20) Check all the logs of git.
- 21) Rename the commit message.
- 22) Merge multiple commits into single commit.