Task 1

Demonstrate minimum 15 basic Git command with explanation and screenshot.

1. git config

This command is used to configure an author name and email associated with your git activities.

```
chandrakanthmamilla@gmail.com
```

2. git init

This command is used to initialize a new git repository.

```
ckmam@DESKTOP-NKCENFT MINGW64 /c/Industry_ready_projects/Git_OpenSource/Git_OpenSource (dev)
$ git init
Reinitialized existing Git repository in C:/Industry_ready_projects/Git_OpenSource/Git_OpenSource/.git/
```

3. git clone

This command is used to clone a remote git repository.

```
ckmam@DESKTOP-NKCENFT MINGW64 /c/Industry_ready_projects/Git_OpenSource/Git_OpenSource (dev)
$ git clone https://github.com/ChandrakanthMamilla/Git_OpenSource
Cloning into 'Git_OpenSource'...
remote: Enumerating objects: 29, done.
remote: Counting objects: 100% (29/29), done.
remote: Compressing objects: 100% (21/21), done.
remote: Total 29 (delta 11), reused 19 (delta 6), pack-reused 0
Receiving objects: 100% (29/29), 799.55 KiB | 3.92 MiB/s, done.
Resolving deltas: 100% (11/11), done.
```

4. git add

This command is used to add files to the staging.

```
ckmam@DESKTOP-NKCENFT MINGW64 /c/Industry_ready_projects/Git_OpenSource/Git_OpenSource (dev)
$ git add .
```

5. git commit

This command is used to record a file permanently in the project version history. It is a standard to add a message associated with the commit.

For committing your staged changes.

```
create mode 100644 requirements.txt
```

For committing both staged and unstaged files.

```
nothing to commit, working tree clean
```

6. git status

This command is used to lists all the committed files.

```
new file: requirements.txt
```

7. git rm

This command is used to delete a specific file from the current working directory and stages the deletion.

```
ckmam@DESKTOP-NKCENFT MINGW64 /c/Industry_ready_projects/Git_OpenSource/Git_OpenSource (dev)
$ git rm "requirements.txt"
rm 'requirements.txt'
```

8. git log

This command is used for listing the version history of the current git branch.

Initial commit

9. git branch

This command is used to create a branch from the current working directory.

Creating a new branch:

```
$ git branch dev1
```

Deleting the feature branch:

```
s git branch -o devi
Deleted branch devi (was 346b5a0).
```

10. git checkout

This command is used for switching among different git branches.

Checkout a git branch:

```
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
```

Create a new branch and switch into it:

```
ckmam@DESKTOP-NKCENFT MINGW64 /c/Industry_ready_projects/Git_OpenSource/Git_OpenSource (dev1)
```

11. git merge

This command is used to merges the specified branch with the current branch.

Merging two branches:

```
create mode 100644 requirements.txt
```

12. git push

This command is used to send your staged changes to the remote repository.

Commit the staged changes to the remote repository.

```
s git push origin main
Everything up-to-date
```

13. git pull

This command is used to get the changes in the remote repository and merge them to the current working directory.

```
Already up to date.
```

14. git remote

Lists the remote connections you have to other repositories. In other words, the git remote command lets you create, view, and delete connection to other repositories.

```
ckmam@DESKTOP-NKCENFT MINGW64 /c/Industry_ready_projects/Git_OpenSource/Git_OpenSource (main)
$ git remote
origin

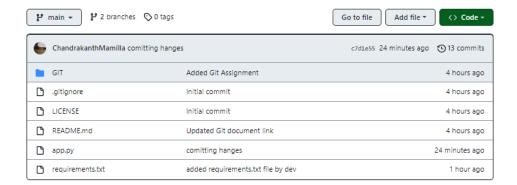
ckmam@DESKTOP-NKCENFT MINGW64 /c/Industry_ready_projects/Git_OpenSource/Git_OpenSource (main)
$ git remote -v
origin https://github.com/ChandrakanthMamilla/Git_OpenSource.git (fetch)
origin https://github.com/ChandrakanthMamilla/Git_OpenSource.git (push)
```

15. git fetch

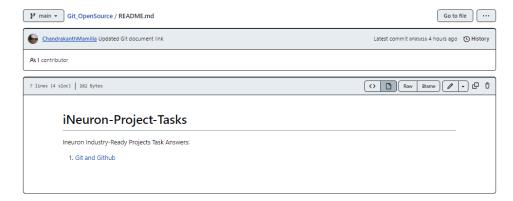
When we use the command git fetch, git gathers any commits information from the target branch that does not exists in our current branch, and stores it in our local repository. However, it doesn't merge it with our current branch.

Task 2

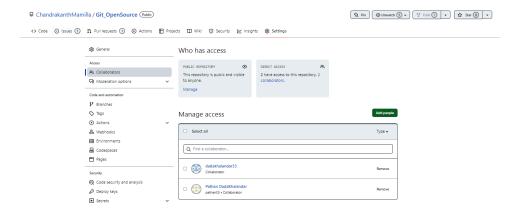
- Consider that you want to start an open-source project in your organization. Perform all the standard operation to create a repository with minimal permission for all the users. It should contain.
- 1. Proper open-source structure



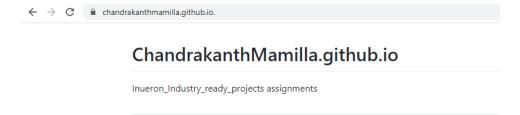
2. Proper Readme



3. Add 2 collaborator

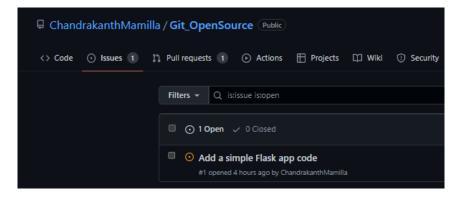


4. Host GitHub Pages using settings (Designed to host your personal, organization, or project pages from a GitHub repository)

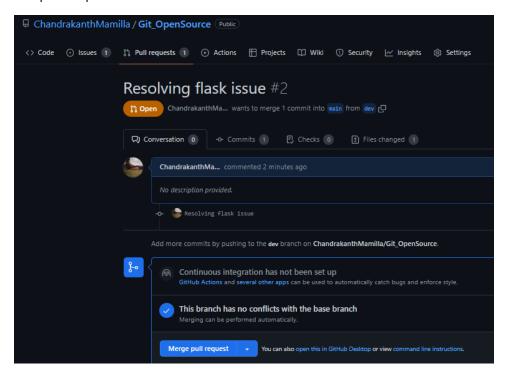


Task 3

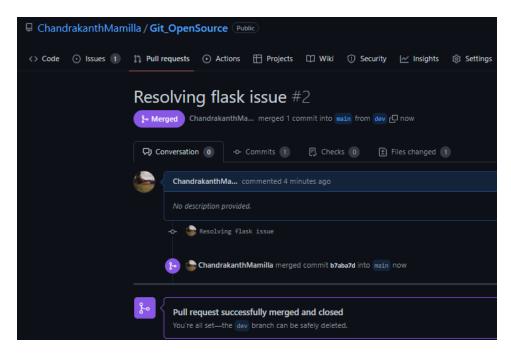
1. Create a Issue in your github repository.



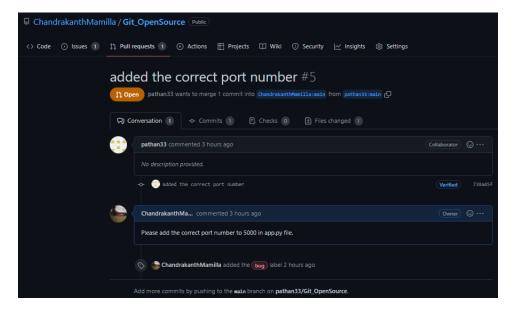
2. Raise a pull request.



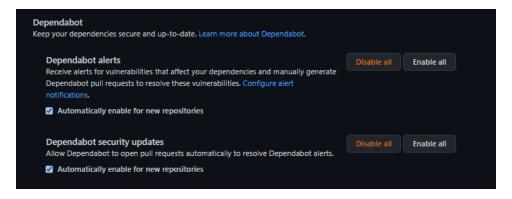
3. Merge A pull request.



4. Reject a pull request with proper comments.

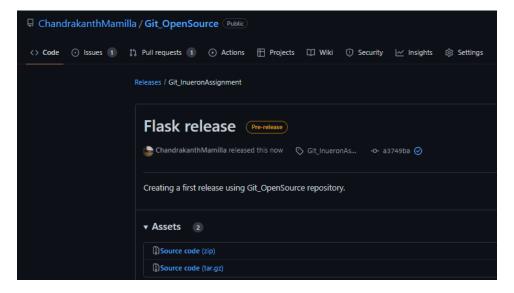


5. Add a Dependabot alerts in your github.(for above cases)



6. Stash changes

7. Create a release your package



8. Setup a Projects Board for your project.

