# Git and Git Hub.

Init:



```
MINGW64:/c/Users/P M S L Aditya/task1

P M S L Aditya@Adityachaitu MINGW64 ~
$ pwd
/c/Users/P M S L Aditya

P M S L Aditya@Adityachaitu MINGW64 ~
$ mkdir task1

P M S L Aditya@Adityachaitu MINGW64 ~
$ cd task1

P M S L Aditya@Adityachaitu MINGW64 ~/task1
$ git init
Initialized empty Git repository in C:/Users/P M S L Aditya/task1/.git/

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ touch test.txt
```

```
MINGW64:/c/Users/P M S L Aditya/task1

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git log
commit 2926e57f602cc110e5a9a66b92a1d15c762c1593 (HEAD -> master)
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:24:25 2022 +0530

    its my first git text file

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ echo "# COGNIZANCE" >> README.md

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git init
Reinitialized existing Git repository in C:/Users/P M S L Aditya/task1/.git/
```

## Status: and Add(stage)

```
MINGW64:/c/Users/P M S L Aditya/task1
$ git add .

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   test.txt
```

Commit:

```
MINGW64:/c/Users/P M S L Aditya/task1

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git log
commit 2926e57f602cc110e5a9a66b92a1d15c762c1593 (HEAD -> master)
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:24:25 2022 +0530

    its my first git text file

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ echo "# COGNIZANCE" >> README.md

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git init
Reinitialized existing Git repository in C:/Users/P M S L Aditya/task1/.git/

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git add README.md
warning: LF will be replaced by CRLF in README.md.
The file will have its original line endings in your working directory

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git commit -m "first commit"
[master fa3483e] first commit
 1 file changed, 1 insertion(+)
 create mode 100644 README.md
```

Log:

```
MINGW64:/c/Users/P M S L Aditya/task1

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ git log
commit 2926e57f602cc110e5a9a66b92a1d15c762c1593 (HEAD -> master)
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:24:25 2022 +0530

    its my first git text file

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (master)
$ echo "# COGNIZANCE" >> README.md
```

```
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git log
commit fa3483e3110a650109a792efef21f492f881e1f2 (HEAD -> main, origin/main)
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:30:50 2022 +0530

    first commit

commit 2926e57f602cc110e5a9a66b92a1d15c762c1593
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:24:25 2022 +0530

    its my first git text file
```

Checkout:



```
MINGW64:/c/Users/P M S L Aditya/task1
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git checkout -b feature1
Switched to a new branch 'feature1'

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ git branch -a
* feature1
  main
  remotes/origin/main

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ touch test2.txt

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ git add .

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ git commit -a
hint: Waiting for your editor to close the file... unix2dos: converting file C:/Users/P M S L Aditya/task1/.git/COMMIT_EDITMSG to DOS format.
dos2unix: converting file C:/Users/P M S L Aditya/task1/.git/COMMIT_EDITMSG to Unix format...
[feature1 0aace2c] hi this is a test file
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test2.txt

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ ls
README.md  test.txt  test2.txt

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ git checkout main

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

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ ls
README.md  test.txt
```

Merge:



```
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ ls
README.md  test.txt  test2.txt

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature1)
$ git checkout main

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

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ ls
README.md  test.txt

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git merge feature1
Updating fa3483e..0aace2c
Fast-forward
 test2.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
```

Push:

```
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git push -u origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 474 bytes | 474.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Adityachaitu/COGNIZANCE.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

Pull:

```
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git log
commit 0aace2cfc627ee8a88bd10a829216977194e3a30 (HEAD -> main, feature1)
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:40:40 2022 +0530

    hi this is a test file

commit fa3483e3110a650109a792efef21f492f881e1f2 (origin/main)
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:30:50 2022 +0530

    first commit

commit 2926e57f602cc110e5a9a66b92a1d15c762c1593
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:24:25 2022 +0530

    its my first git text file

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git pull
Already up to date.
```
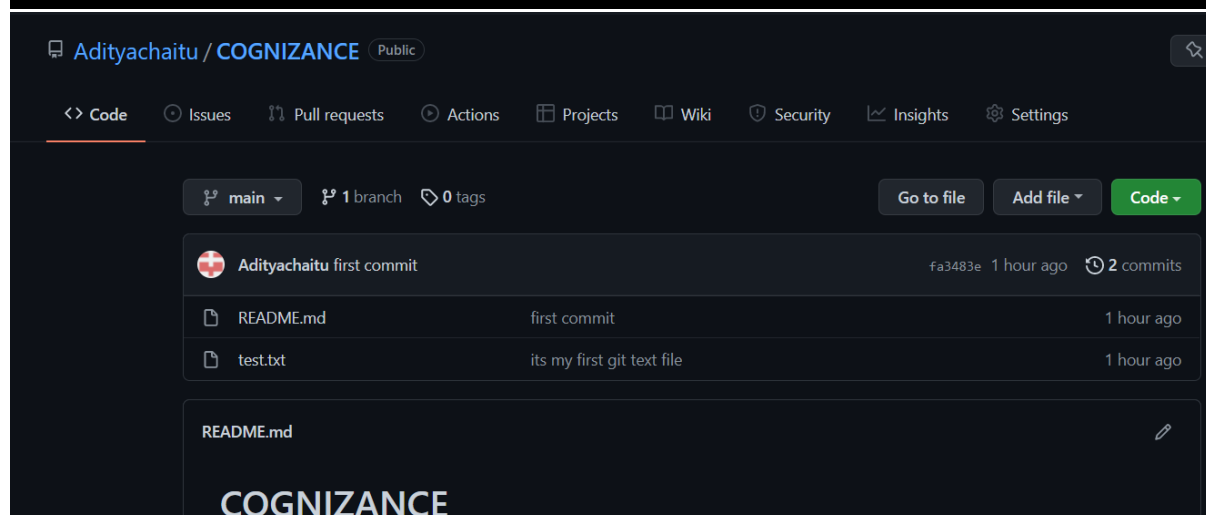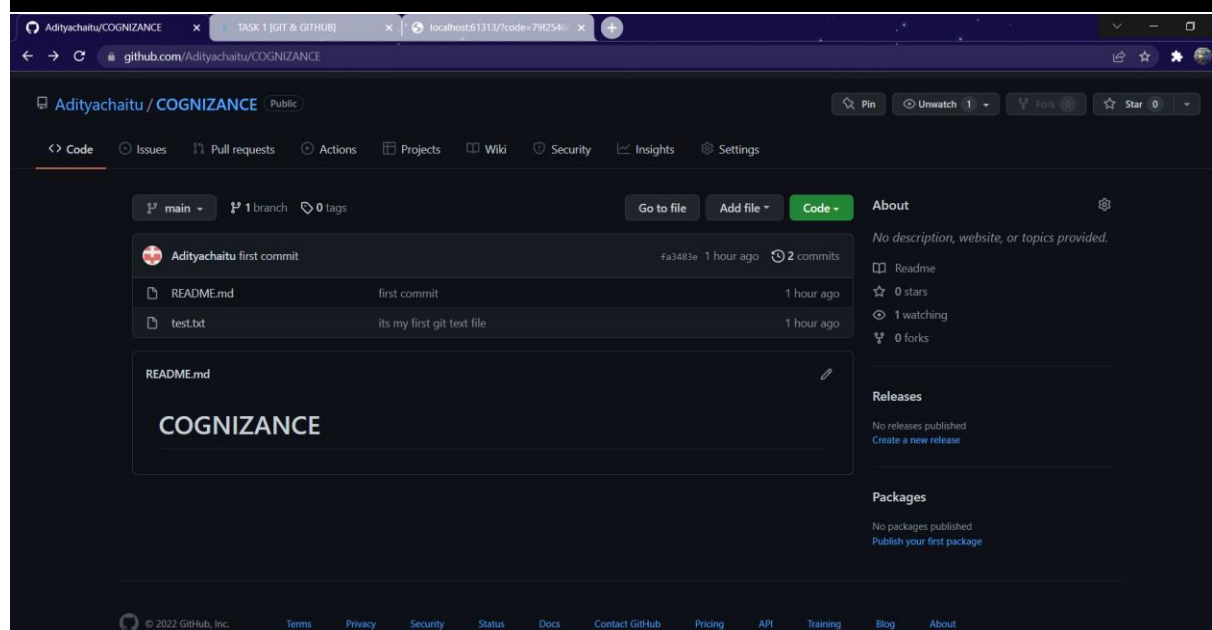
Git config –list –show-origin:



```
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git config --list --show-origin

file:D:/Git/etc/gitconfig          diff.astextplain.textconv=astextplain
file:D:/Git/etc/gitconfig          filter.lfs.clean=git-lfs clean -- %f
file:D:/Git/etc/gitconfig          filter.lfs.smudge=git-lfs smudge -- %f
file:D:/Git/etc/gitconfig          filter.lfs.process=git-lfs filter-process
file:D:/Git/etc/gitconfig          filter.lfs.required=true
file:D:/Git/etc/gitconfig          http.sslbackend=openssl
file:D:/Git/etc/gitconfig          http.sslcainfo=D:/Git/mingw64/ssl/certs/ca-bundle.crt
file:D:/Git/etc/gitconfig          core.autocrlf=true
file:D:/Git/etc/gitconfig          core.fscache=true
file:D:/Git/etc/gitconfig          core.symlinks=false
file:D:/Git/etc/gitconfig          core.editor=notepad
file:D:/Git/etc/gitconfig          pull.rebase=false
file:D:/Git/etc/gitconfig          credential.helper=manager-core
file:D:/Git/etc/gitconfig          credential.https://dev.azure.com.usehttppath=true
file:D:/Git/etc/gitconfig          init.defaultbranch=master
file:C:/Users/P M S L Aditya/.gitconfig user.name=Adityachaitu
file:C:/Users/P M S L Aditya/.gitconfig user.email=adityachaitu135@gmail.com
file:.git/config          core.repositoryformatversion=0
file:.git/config          core.filemode=false
file:.git/config          core.bare=false
file:.git/config          core.logallrefupdates=true
file:.git/config          core.symlinks=false
file:.git/config          core.ignorecase=true
file:.git/config          remote.origin.url=https://github.com/Adityachaitu/COGNIZANCE.git
file:.git/config          remote.origin.fetch=+refs/heads/*:refs/remotes/origin/*
file:.git/config          branch.main.remote=origin
file:.git/config          branch.main.merge=refs/heads/main

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$
```

Clone:

```
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git clone https://github.com/Adityachaitu/COGNIZANCE.git
Cloning into 'COGNIZANCE'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 0), reused 6 (delta 0), pack-reused 0
Receiving objects: 100% (6/6), done.

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ ls
```

Reset:

```
MINGW64:/c/Users/P M S L Aditya/task1
Already up to date.

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git log --oneline
0aace2c (HEAD -> main, feature1) hi this is a test file
fa3483e (origin/main) first commit
2926e57 its my first git text file

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git reset fa3483e

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git reset fa3483e --hard
HEAD is now at fa3483e first commit

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git log
commit fa3483e3110a650109a792efef21f492f881e1f2 (HEAD -> main, origin/main)
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:30:50 2022 +0530

    first commit

commit 2926e57f602cc110e5a9a66b92a1d15c762c1593
Author: Adityachaitu <adityachaitu135@gmail.com>
Date:   Tue Feb 15 12:24:25 2022 +0530

    its my first git text file

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ ls
README.md  test.txt  test2.txt
```

Rebase:

```
P M S L Aditya@Adityachaitu MINGW64 ~/task1 (main)
$ git checkout -b feature2
Switched to a new branch 'feature2'

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature2)
$ git rebase main
Current branch feature2 is up to date.

P M S L Aditya@Adityachaitu MINGW64 ~/task1 (feature2)
$
```