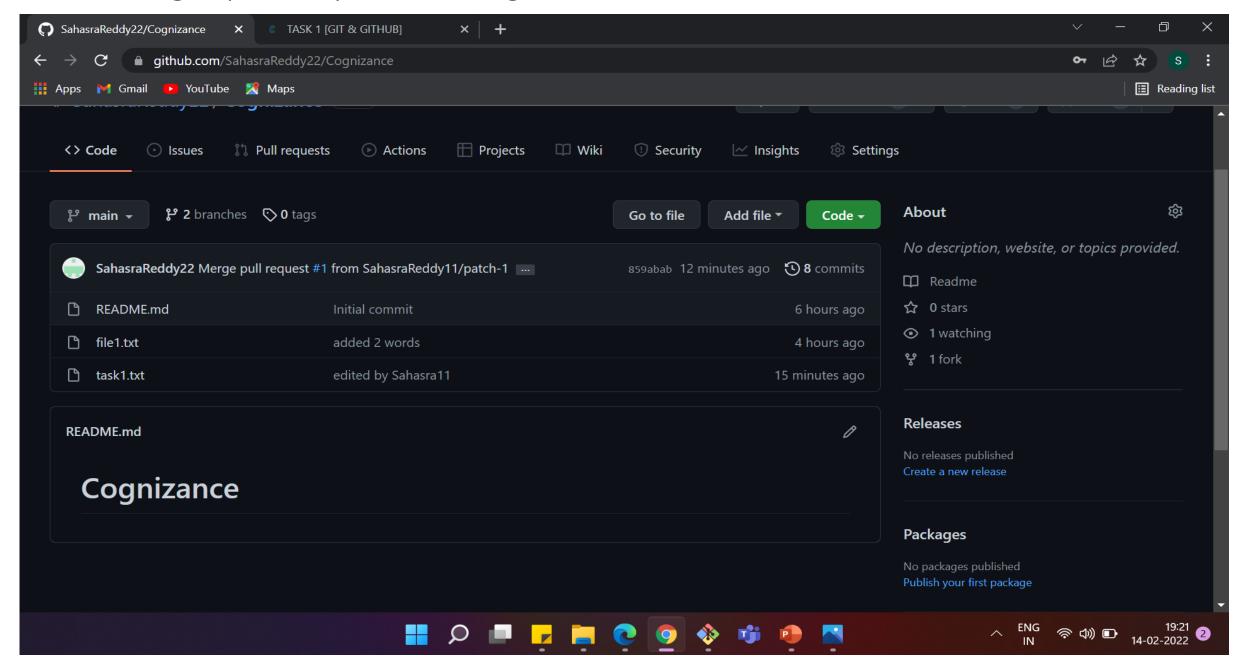
TASK-1

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Creating repository named cognizance and folder named task-1



Git add:Puts current working files into the stage.

```
MINGW64:/c/Users/sahas/documents/cognizance
                                                                         sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.
Untracked files:
  (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git add task1.txt
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (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: task1.txt
```

Git checkout: Replaces the current working files with files from a branch

```
MINGW64:/c/Users/sahas/documents/cognizance
                                                                         sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (1stbranch)
$ git checkout main
Switched to branch 'main'
        task1.txt
Your branch is up to date with 'origin/main'.
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git push origin 1stbranch
Total O (delta O), reused O (delta O), pack-reused O
remote:
remote: Create a pull request for '1stbranch' on GitHub by visiting:
             https://github.com/SahasraReddy22/Cognizance/pull/new/1stbranch
remote:
remote:
To https://github.com/SahasraReddy22/Cognizance.git
   [new branch]
                 1stbranch -> 1stbranch
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git branch
  1stbranch
* main
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
```

Git Checkout-b: Creates a new local branch from the current branch's tip.

```
MINGW64:/c/Users/sahas/documents/cognizance
  (use "git add <file>..." to include in what will be committed)
        task1.txt
nothing added to commit but untracked files present (use "git add" to track)
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git add task1.txt
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (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: task1.txt
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git checkout -b 1stbranch
Switched to a new branch '1stbranch'
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (1stbranch)
```

Git clone: Clone an existing repository into a new directory.

```
MINGW64:/c/Users/sahas/documents
 Templates@
 Videos/
'VirtualBox VMs'/
ntuser.dat.LOG1
ntuser.dat.LOG2
 ntuser.ini
sahas@LAPTOP-41VBC8HG MINGW64 ~
$ cd documents
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents
$ git clone https://github.com/SahasraReddy22/Cognizance.git
Cloning into 'Cognizance'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
```

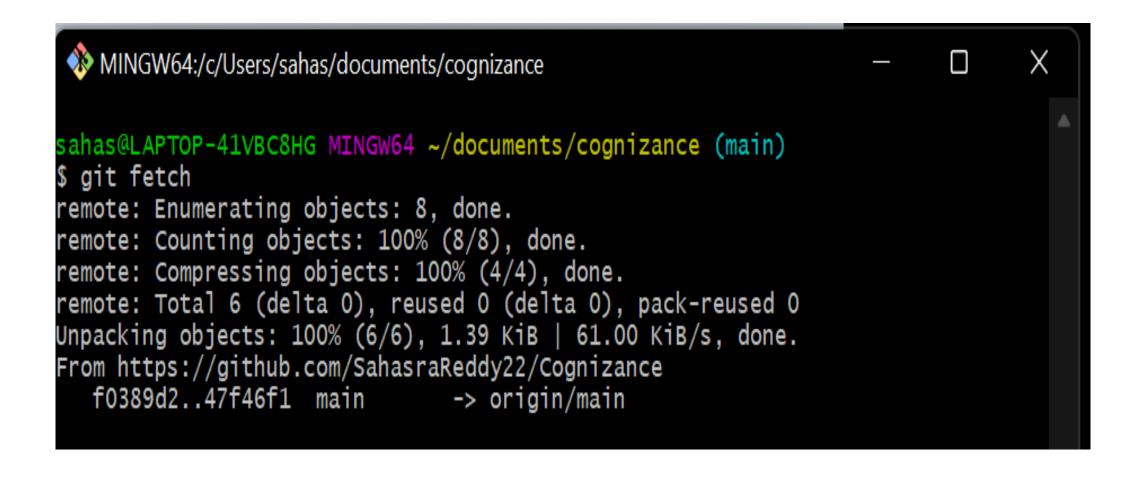
Git commit:Commits staged changes to a local branch.

```
MINGW64:/c/Users/sahas/documents/cognizance
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git branch
  1stbranch
  main
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (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: task1.txt
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git commit
[main ba7e662] new file commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 task1.txt
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
```

Git commit -a:Commits all modified files to a local branch(shorthand for "git add" followed by "git commit" for each modified file).

```
MINGW64:/c/Users/sahas/documents/cognizance
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git status
On branch main
Your branch and 'origin/main' have diverged,
and have 7 and 5 different commits each, respectively.
  (use "git pull" to merge the remote branch into yours)
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
Untracked files:
  (use "git add <file>..." to include in what will be committed)
no changes added to commit (use "git add" and/or "git commit -a")
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git commit -a
[main 2ef8690] this is 1st commit-a
1 file changed, 1 insertion(+)
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
```

Git fetch: Downloads changes from a remote repository into the local clone.



Git merge: Merges files from a given branch into the current branch

```
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git merge
Updating f0389d2..47f46f1
Fast-forward
file1.txt | 2 ++
1 file changed, 2 insertions(+)
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
```

Git pull: Fetches remote changes on the current branch into the local clone, and merges them into the current working files.

```
MINGW64:/c/Users/sahas/documents/cognizance
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git pull
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100\% (3/3), 659 bytes | 54.00 KiB/s, done.
From https://github.com/SahasraReddy22/Cognizance
  47f46f1..b95b2a9 main
                                -> origin/main
Updating 47f46f1..b95b2a9
Fast-forward
task1.txt | 1 +
1 file changed, 1 insertion(+)
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
```

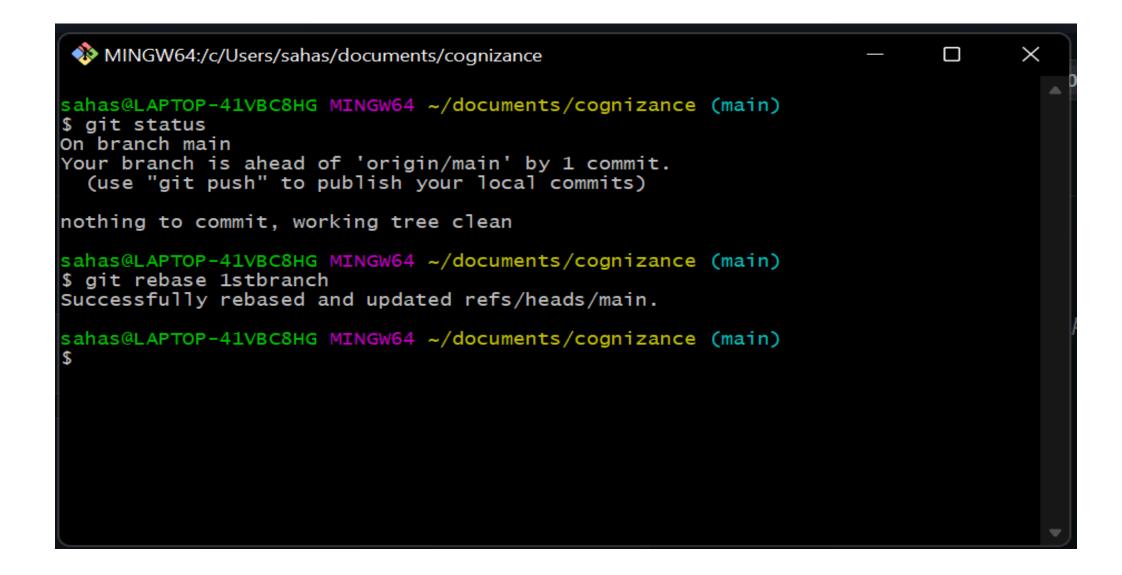
Git Push:Uploads changes from all local branches to the respective remote repositories

```
MINGW64:/c/Users/sahas/documents/cognizance
                                                                         sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (1stbranch)
$ git checkout main
Switched to branch 'main'
        task1.txt
Your branch is up to date with 'origin/main'.
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git push origin 1stbranch
Total O (delta O), reused O (delta O), pack-reused O
remote:
remote: Create a pull request for '1stbranch' on GitHub by visiting:
             https://github.com/SahasraReddy22/Cognizance/pull/new/1stbranch
remote:
remote:
To https://github.com/SahasraReddy22/Cognizance.git
* [new branch]
                1stbranch -> 1stbranch
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
$ git branch
 1stbranch
 main
sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main)
```

Git Reset: Makes the current branch point to some specific revision or branch

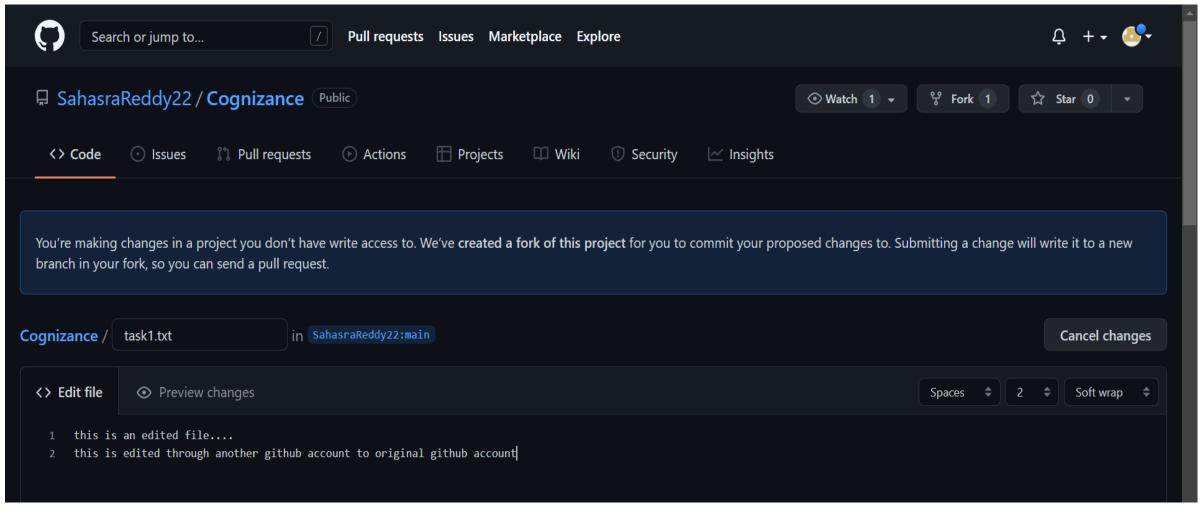
MINGW64:/c/Users/sahas/documents/cognizance sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main) \$ vi file1.txt sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main) \$ vi file2.txt sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main) \$ git status On branch main Your branch is up to date with 'origin/main'. Changes to be committed: (use "git restore --staged <file>..." to unstage) new file: file2.txt Changes not staged for commit: (use "git add <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory) sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main) \$ git add * warning: LF will be replaced by CRLF in file2.txt. The file will have its original line endings in your working directory sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main) \$ gitstatus bash: gitstatus: command not found sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (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) modified: file1.txt new file: file2.txt sahas@LAPTOP-41VBC8HG MINGW64 ~/documents/cognizance (main) \$ git reset HEAD file1.txt Unstaged changes after reset: file1.txt

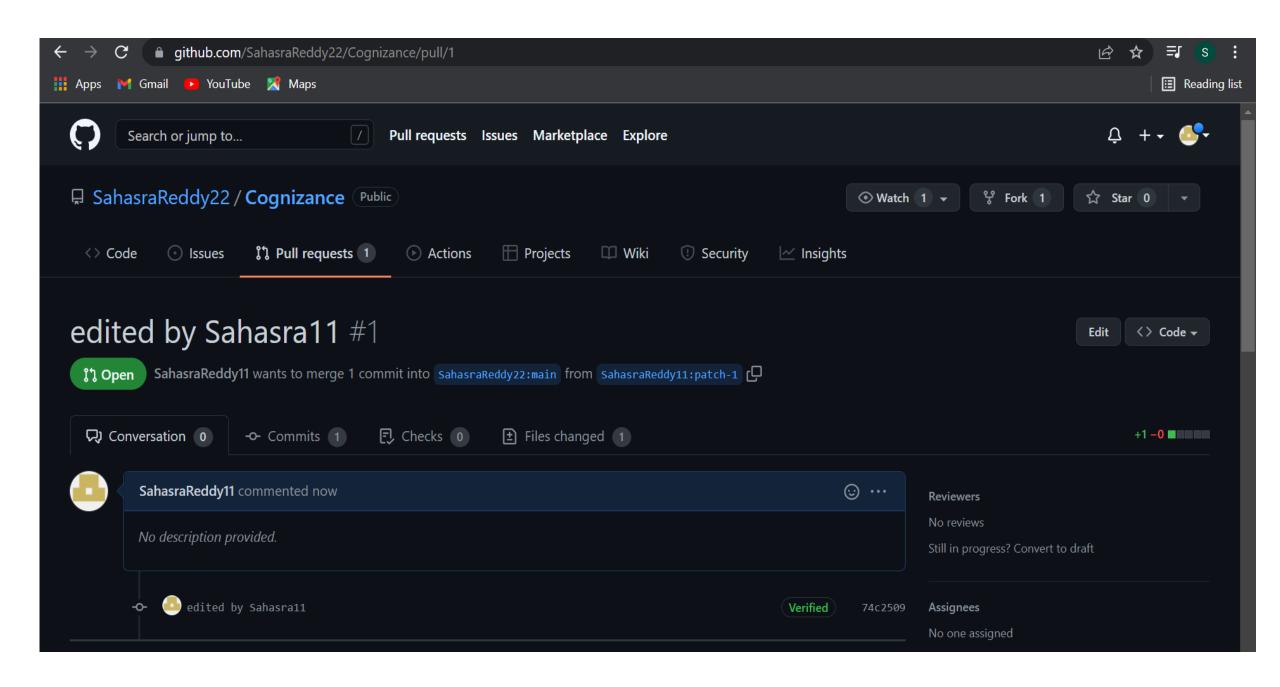
Git rebase: Integrates changes from one branch into another. It is an alternative to the better known "merge" command.



Git Fork: Fork will create a copy of the repository in your GitHub account so that you can make changes to the project.

Here I edited the file from SahasraReddy11 account by using fork into the account SahasraReddy22





Git config —list —show-

```
NINGW64:/
sahas@LAPTOP-41VBC8HG MINGW64 /
$ git config --list --show-origin
file:C:/Program Files/Git/etc/gitconfig diff.astextplain.textconv=astextplain
file:C:/Program Files/Git/etc/gitconfig filter.lfs.clean=git-lfs clean -- %f
file:C:/Program Files/Git/etc/gitconfig filter.lfs.smudge=git-lfs smudge -- %f
file:C:/Program Files/Git/etc/gitconfig filter.lfs.process=git-lfs filter-proces
file:C:/Program Files/Git/etc/gitconfig filter.lfs.required=true
file:C:/Program Files/Git/etc/gitconfig http.sslbackend=openssl
file:C:/Program Files/Git/etc/gitconfig http.sslcainfo=C:/Program Files/Git/ming
w64/ssl/certs/ca-bundle.crt
file:C:/Program Files/Git/etc/gitconfig core.autocrlf=true
file:C:/Program Files/Git/etc/gitconfig core.fscache=true
file:C:/Program Files/Git/etc/gitconfig core.symlinks=false
file:C:/Program Files/Git/etc/gitconfig pull.rebase=false
file:C:/Program Files/Git/etc/gitconfig credential.helper=manager-core
file:C:/Program Files/Git/etc/gitconfig credential.https://dev.azure.com.usehttp
path=true
file:C:/Program Files/Git/etc/gitconfig init.defaultbranch=master
file:C:/Users/sahas/.gitconfig user.name=SahasraReddy22
file:C:/Users/sahas/.gitconfig user.email=ch.en.u4cys21037@ch.students.amrita.e
 ahas@LAPTOP-41VBC8HG MINGW64 /
```