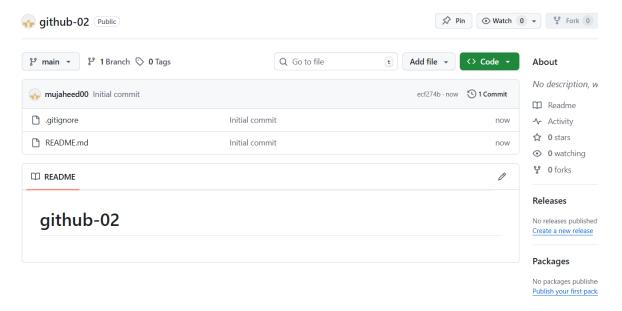
### 1. Install git:

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~
$ git --version
git version 2.37.1.windows.1
```

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

Created a repository named as github-02 with README.md and ignore file



### 3. Clone the created repo to local.

First we need to create a directory in local machine named as Github-02



Open git bash with that Github-02 directory and execute the command: git clone <ssh address of our repo>
Then the information in the central repo will come to the local machine

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)

$ git clone git@github.com:mujaheed00/github-02.git
cloning into 'github-02'...
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (4/4), done.

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)

$ ls
github-02/
```

11-09-2025 17:32

11-09-2025 17:32

8 KB

1 KB

Git Ignore Source ...

Markdown Source ...

### 4. Create two files in local repo

gitignore.

**▼** README

Created two files named as abc ,123 by using touch command

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master) $ touch abc 123

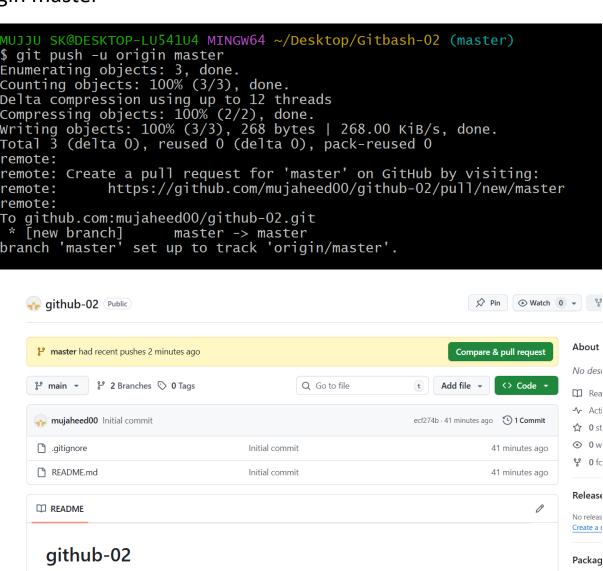
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master) $ 1s  
123 abc github-02/
```

### 5. Commit two files and push into central repository

Execute git commit command to commit :git commit -m "added two files in github-02"

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)
$ git commit -m "added two files in github-02"
[master (root-commit) ed88756] added two files in github-02
3 files changed, 1 insertion(+)
create mode 100644 123
create mode 100644 abc
create mode 160000 github-02
```

And push that two files into repository by using – push – u origin master



No packa

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

Create a branch in local by using command: git branch release (Release is the branch name)

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)
$ git branch release
```

Then switch the branch to release using git checkout release

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)
$ git checkout release
Switched to branch 'release'
```

Create a file in release branch named as alphabets and commit it and push it into repository

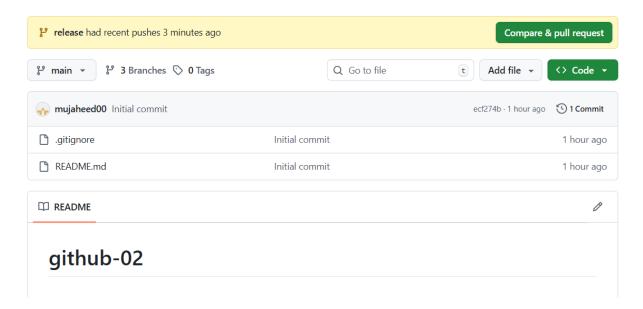
```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (release) $ touch alphabets
```

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (release)

§ git commit -m "added a file in release"
[release 9b0e510] added a file in release
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 alphabets

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (release)

§ git push -u origin release
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 249 bytes | 249.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'release' on GitHub by visiting:
remote: https://github.com/mujaheed00/github-02/pull/new/release
remote:
To github.com:mujaheed00/github-02.git
 * [new branch] release -> release
branch 'release' set up to track 'origin/release'.
```



### 7. Create a branch in github and clone in the local

Created a branch in git hub named as apple



Use git pull command to pull the branch from repository to local

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (release)

$ git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (4/4), 3.94 KiB | 168.00 KiB/s, done.
From github.com:mujaheed00/github-02

* [new branch] apple -> origin/apple

* [new branch] main -> origin/main
Already up to date.
```

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

If you merge same identical file consists of with similar content shows merge conflict

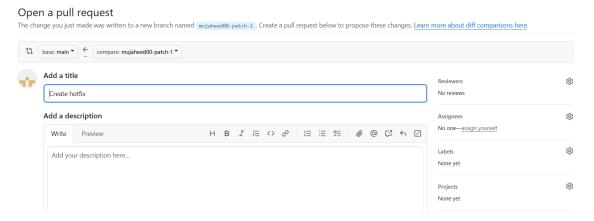
```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)
$ git merge release
Auto-merging alphabets
CONFLICT (add/add): Merge conflict in alphabets
Automatic merge failed; fix conflicts and then commit the result.
```

Go to the vi alphabets and edit the text and add git add . and commit the changes then the merged file looks like

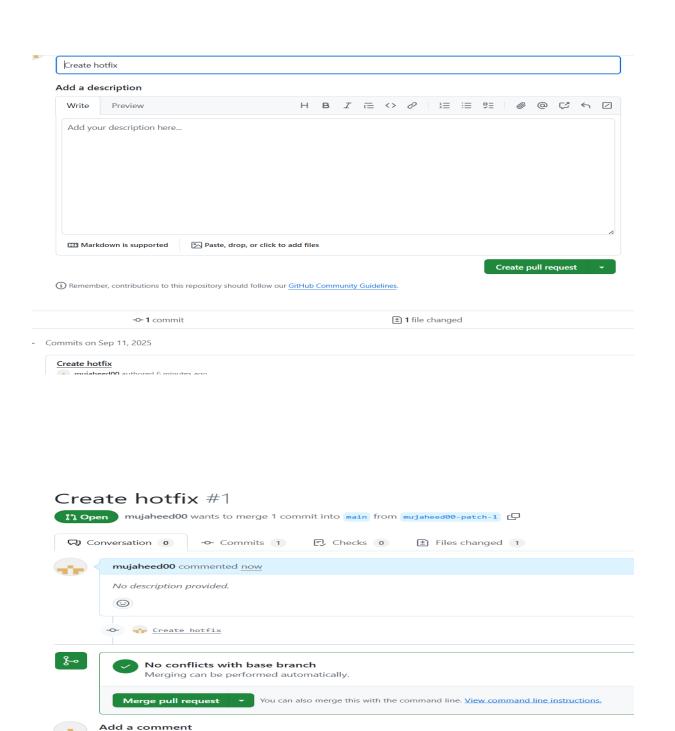
```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)
$ cat alphabets
hello master and alphabets
```

9. Merge the created branch with master in github by sending a pull request.

Create a file and add title



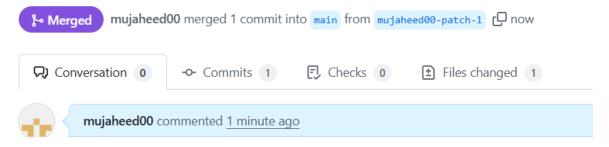
Give the name and click create pull then it will be created after that click on merge then it will be merged



Write

Preview Add vour comment here... 

### Create hotfix #1



# 10. Create a file in local and send that to branch in github.

Create a touch file in local machine

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master) $ touch test

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master) $ 1s  
123 abc alphabets github-02/ test

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master) $ |
```

And git add . and commit the changes and push the file into repository

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)

$ git add .

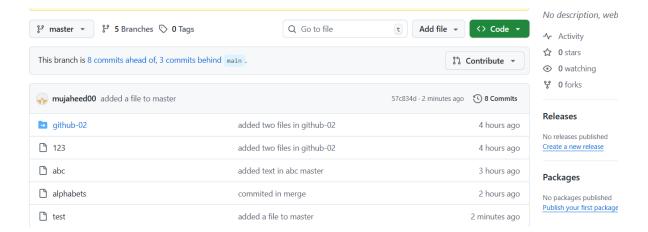
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)

$ git commit -m "added a file to master"
[master 57c834d] added a file to master

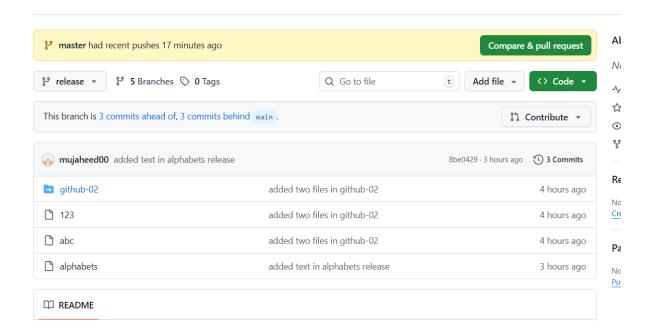
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 test

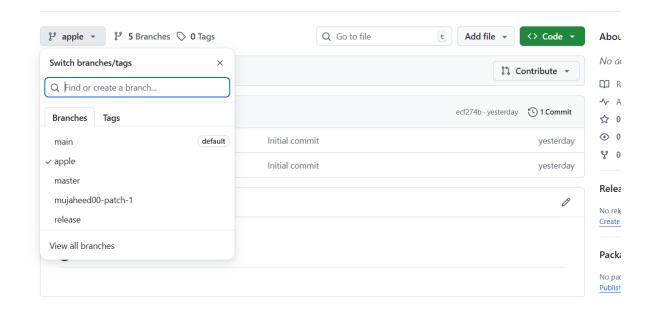
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (master)

$ git push origin master
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (5/5), 532 bytes | 532.00 KiB/s, done.
Total 5 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 1 local object.
To github.com:mujaheed00/github-02.git
14c7c3e..57c834d master -> master
```



### 11. Clone only a branch from github to local





For cloning branch we should need to use: git clone --single-branch –branch apple

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git clone --single-branch --branch apple git@github.com:mujaheed00/github-02.git
fatal: destination path 'github-02' already exists and is not an empty directory.

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git branch --list
* apple
master
release
```

# 12. Create a file with all passwords and make that untrackable with git.

Create a file named as touch

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ touch password

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ ls

README.md github-02/ password
```

Using visual studio add password in the file .gitignore and check status

## 13. Make a commit and make that commit reset without savings changes.

no changes added to commit (use "git add" and/or "git commit -a")

Use git reset --hard commit id to reset without changes

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git log
commit c574fc6f2d8f93104e568b37efd3b3bbb8b13769 (HEAD -> apple)
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
Date: Fri Sep 12 14:50:12 2025 +0530

    clone apple to local

commit ecf274b2af635c19142be292eafaf9eaf79069cc (origin/main, origin/apple)
Author: mujaheed00 <mohammadmujaheedshaik@gmail.com>
Date: Thu Sep 11 17:20:53 2025 +0530

    Initial commit

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git reset --hard c574fc
HEAD is now at c574fc6 clone apple to local
```

#### 14. Revert a committed commit to the older version.

Use git revert commit id to revert a commit id to older version

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git log -1
commit 06968670f9a985ea24ce21c92c1cace77aa6b786 (HEAD -> apple)
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
Date: Fri Sep 12 15:20:09 2025 +0530

Revert "clone apple to local"

This reverts commit c574fc6f2d8f93104e568b37efd3b3bbb8b13769.

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git revert 069686
[apple e257a4b] Revert "Revert "clone apple to local""
1 file changed, 1 insertion(+)
create mode 160000 github-02

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ |
```

### 15. Push a file to stash without savings the changes and work on another file.

Git stash is used to push a file to stash

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)

$ git status

On branch apple

Your branch is ahead of 'origin/apple' by 3 commits.

(use "git push" to publish your local commits)

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)

modified: .gitignore

no changes added to commit (use "git add" and/or "git commit -a")

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)

$ git stash

Saved working directory and index state WIP on apple: e257a4b Revert "Revert "clone apple to local""

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)

$ git stash
```

### 16. undo that stash file and start working on that again.

Git stash pop is the command to undo the stash file from stash

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
 git stash pop
On branch apple
Your branch is ahead of 'origin/apple' by 3 commits.
  (use "git push" to publish your local commits)
no changes added to commit (use "git add" and/or "git commit -a")
Dropped_refs/stash@{0} (eca74f43eb208511379e18b0de1101d8658f84ed)
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
git status
on branch apple
Your branch is ahead of 'origin/apple' by 3 commits. (use "git push" to publish your local commits)
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)
no changes added to commit (use "git add" and/or "git commit -a")
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
```

### 17. Generate a ssh-keygen and configure into github.

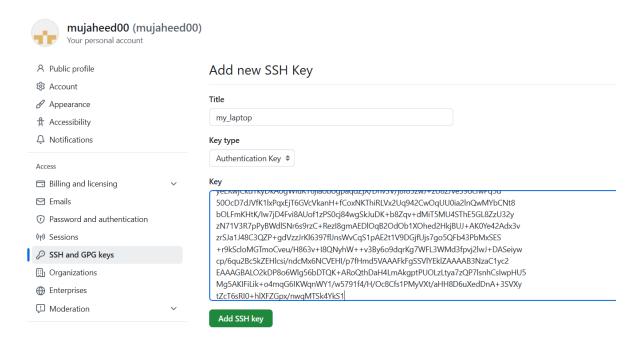
Use command ssh-keygen

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/Ashish/.ssh/id_rsa):
```

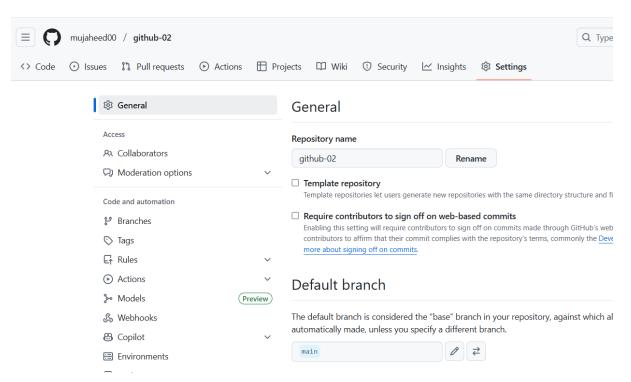
### Use cat and key id of key

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ cat /c/Users/Ashish/.ssh/id_rsa
----BEGIN OPENSSH PRIVATE KEY-----
b3Blbnnzac1rZxktdjEAAAAABG5vbmUAAAAEbm9uZQAAAAAAAABAAABlwAAAAdzc2gtcn
NhAAAAWEAAQAAAYEAS7aQM/yjpaWDnpsNNAr4BGhC2ENofguYCSCm09Q4vMu3JrvNA/uW
yeEKwjckdTkyDkAogwIuKT6jiaobogpaqdZjX/Dnv3V/j8f85zwJ+zU8zJVe39ocfwPq5d
50ocD7dJVfK11xPqxEjT6GvcVkanH+fCoxNKThiRLVx2Uq942CwoqUU0ia2lnQwMYbCNt8
b0LFmKHtK/Iw7jD4Fvi8AUof1zPS0cj84wgSkJuDK+b8Zqv+dMiT5MU4SThE5GL8ZzU32y
zN71V3R7pPyBwdlSNr6s9rzC+RezI8gmAEDl0qB20dob1X0hed2HkjBUJ+AK0Ye42Adx3v
zrsJa1J48C3QZP+gdVzzJrK16397f1JnswvCqs1pAE2t1V9DGjfUjs7go5QFb43PbMxSES
+r9kscloMGTmocveu/H863v+I8QNyhW++v3By6o9dqrkg7WFL3WMd3fpvj2lwJ+DASeiyw
cp/6qu2Bc5kZEHlcsi/ndcMx6NCVEHI/p7fHmd5vAAAFkFgssvlYEk1ZAAAAB3NzaC1yc2
EAAAGBAL02kDP8o6Wlg56bDTQK+AROQthDaH4LmAkgptPU0LzLtya7zQP7lsnhCsIwpHU5
Mg5AKIFiLik+o4mqG6IKWqnWY1/w5791f4/H/oc8cfs1PMyvXt/aHH8D6uxedDnA+3SVXy
tzcT6sRI0+hlXFZGpx/nwqMTsk4YkSlcdlKveNgsDqlFNImtpZ0MDGGwjbfGzixzih7Svy
MO4w+Bb4vAFKH9cz0tHI/OMIEpCbgyvm/Gar/nTIk+TF0Ek4RORi/Gc1N9ssze9vd0e6T8
gVnZUja+rPa8wvkxsyPIJgBA5TqqdjnTm9VzoXndh5IwVCfgctGHuNgHcd7860iwtsePAt
OGT/oHVc8yaypet/e35Sz7FrwqktaQBNrdVfQxo3117O4K0UBW+Nz2zMUhevq/ZEnJaDBk
5qAr3rvx/Ot7/iPEDcoVvvr9wcuqPXaqyoO1hs91jHd36b49pccfgwEnossHKf+qrtgXOZ
GRB5XLIv53XDMejQlRByP6e3x5neVQAAAAMBAAEAAAGAalU2A5yTU3qYYysI5+cpkqoCCy
```

Go to git hub settings and click on SSH and GPG keys and click on new key and paste that key address and add new key



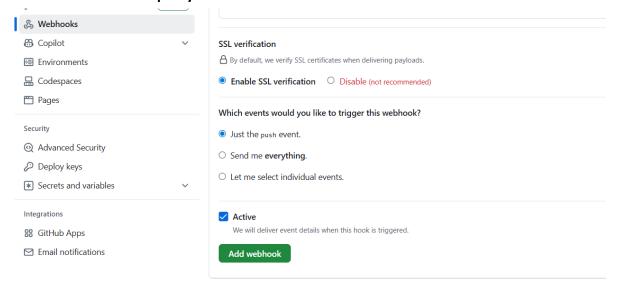
### 18. Configure webhooks to github.



Select the repository where you need to add the web hooks

Click the settings option in that repository. At left side we are seeing a tab call webhooks click the webhooks and add the web hooks.

 Under playload URL ,Type the URL where you need to like receive the playloads



- •application/x-www-form-urlencoded will send the JSON payload as a form parameter called payload.
- •Optionally, under "Secret", type a string to use as a secret key. You should choose a random string of text with high entropy. You can use the webhook secret to limit incoming requests to only those originating from GitHub.

### 19. Basic understanding of .git file.

The .git directory is the core component of a Git repository. It is a hidden directory .

Git to track changes, manage versions, and perform various operations.

where Git stores the entire history and metadata of your project.

```
MINGW64:/c/Users/Ashish/Desktop/Gitbash-02

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)

$ ls -a
./ ../ .git/ .gitignore README.md github-02/ password

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)

$ |
```

### 20. Check all the logs of git.

Use git log to check all the logs in git

```
SKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
 git log
commit e257a4b262cc1b3db85301090f098b6e56e3e86b (HEAD -> apple)
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
         Fri Sep 12 15:22:19 2025 +0530
    Revert "Revert "clone apple to local""
    This reverts commit 06968670f9a985ea24ce21c92c1cace77aa6b786.
commit 06968670f9a985ea24ce21c92c1cace77aa6b786
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
         Fri Sep 12 15:20:09 2025 +0530
    Revert "clone apple to local"
    This reverts commit c574fc6f2d8f93104e568b37efd3b3bbb8b13769.
commit c574fc6f2d8f93104e568b37efd3b3bbb8b13769
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
         Fri Sep 12 14:50:12 2025 +0530
Date:
    clone apple to local
commit ecf274b2af635c19142be292eafaf9eaf79069cc (origin/main, origin/apple)
Author: mujaheed00 <mohammadmujaheedshaik@gmail.com>
         Thu Sep 11 17:20:53 2025 +0530
    Initial commit
```

### 21. Rename the commit message.

### Git commit --amend is used to rename a commit message

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git log
commit e257a4b262cc1b3db85301090f098b6e56e3e86b (HEAD -> apple)
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
Date: Fri Sep 12 15:22:19 2025 +0530

Revert "Revert "clone apple to local""

This reverts commit 06968670f9a985ea24ce21c92c1cace77aa6b786.
```

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)

$ git commit --amend
[apple 1097115] Revert "Revert "clone apple to local""

Date: Fri Sep 12 15:22:19 2025 +0530

1 file changed, 1 insertion(+)
create mode 160000 github-02

MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)

$ git log
commit 109711574e6d725a15949a1dfde58a6f03fe2cb9 (HEAD -> apple)
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
Date: Fri Sep 12 15:22:19 2025 +0530

Revert "Revert "clone apple to local""

This reverts commit 06968670f9a985ea24ce21c92c1cace77aa6b786.
```

### 22. Merge multiple commits into single commit.

Use command git rebase -I HEAD~4 and replace pick to squash

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple)
$ git rebase -i HEAD~4
warning: unable to rmdir 'github-02': Directory not empty
interactive rebase in progress; onto ecf274b

Last commands done (2 commands done):

pick c574fc6 clone apple to local

squash 0696867 Revert "clone apple to local"
Next commands to do (2 remaining commands):
squash 1097115 Revert "Revert "clone apple to local""
    squash bf24d4a modified gitignore
  (use "git rebase --edit-todo" to view and edit)
You are currently rebasing branch 'apple' on 'ecf274b'.
  (all conflicts fixed: run "git rebase --continue")
Untracked files:
  (use "git add <file>..." to include in what will be committed)
          github-02/
          password
No changes
You asked to amend the most recent commit, but doing so would make
it empty. You can repeat your command with --allow-empty, or you can
remove the commit entirely with "git reset HEAD^".
Could not apply 0696867... Revert "clone apple to local"
```

## Then change 3 picks to squash then it will merge 3 commits to single commit

```
MUJJU SK@DESKTOP-LU541U4 MINGW64 ~/Desktop/Gitbash-02 (apple|REBASE 2/4)
$ git log
commit c574fc6f2d8f93104e568b37efd3b3bbb8b13769 (HEAD)
Author: Mujaheed <mohammadmujaheedshaik@gmail.com>
Date: Fri Sep 12 14:50:12 2025 +0530

clone apple to local

commit ecf274b2af635c19142be292eafaf9eaf79069cc (origin/main, origin/apple)
Author: mujaheed00 <mohammadmujaheedshaik@gmail.com>
Date: Thu Sep 11 17:20:53 2025 +0530

Initial commit
```