GIT Commands

git init:

To initialize the local repository.

```
DELL@DELL-7490CH11 MINGW64 /<mark>d/new_git</mark>
$ git init
Initialized empty Git repository in D:/new_git/.git/
```

Creating username and respective mail ID:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git config --global user.name "manish"

DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git config --global user.mail "manishhammagi@gmail.com"
```

Creating file:

touch <file name>:

To create file

```
DELL@DELL-7490CH11 MINGW64 /d/new_git (master)

$ touch file1
```

git add <file name>:

It will take snapshot of the file to the staging area.

```
DELL@DELL-7490CH11 MINGW64 /d/new_git (master)
$ git add file1
```

git commit -m "<message>":

It will commits and save the file to the local repo.

```
DELL@DELL-7490CH11 MINGW64 /d/new_git (master)

$ git commit -m "Adding file"
[master (root-commit) 918c2f7] Adding file

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file1
```

git status:

It will give which file are yet to commit.

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git status
On branch master
nothing to commit, working tree clean
```

git log:

To check the information of all the file

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git log
commit f5d86de98cd474dfefd43e0ed0a4fcd7ed3bd987 (HEAD -> master)
Author: manish <manishhammagi@gmail.com>
Date: Tue Aug 6 11:40:27 2024 +0530

adding file2

commit b031ae723050839dfe99ed52693a76ca1aa346b2
Author: manish <manishhammagi@gmail.com>
Date: Tue Aug 6 11:39:54 2024 +0530

adding file1
```

git branch
 stranch name>:

To create branch

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git branch feature1
```

git branch:

To check how many branches are there

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git branch
  feature1
* master
```

git checkout <branch name>:

To switch the branch

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git checkout feature1
Switched to branch 'feature1'
```

git merge
branch name>:

to merge the branch to the master

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)

$ git merge feature1
Updating f5d86de..714c456

Fast-forward
file3 | 0
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file3
```

git cherry-pick <commitID>:

to copy particular latest committed

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git log --oneline
7b6a45b (HEAD -> master) adding file4
714c456 (feature1) adding file3
f5d86de adding file2
b031ae7 adding file1

DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git checkout feature2
Switched to branch 'feature2'

DELL@DELL-7490CH11 MINGW64 /d/git_repo (feature2)
$ git cherry-pick 7b6a45b
[feature2 069a7c7] adding file4
Date: Tue Aug 6 11:59:55 2024 +0530
1 file changed, 0 insertions(+), 0 deletions(-) create mode 100644 file4
```

git tag:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)

§ git tag -a version -m "new version" c6df817

DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)

§ git log --oneline
c6df817 (HEAD -> master, tag: version) adding file6
b02c998 Merge branch 'feature2'
D69a7c7 (feature2) adding file4
5d0b45e adding file5
7b6a45b adding file4
714c456 (feature1) adding file3
f5d86de adding file2
b031ae7 adding file1
```

git show <tag name>:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git show version
tag version
Tagger: manish <manishhammagi@gmail.com>
Date: Tue Aug 6 12:36:47 2024 +0530

new version

commit c6df8172a1a0dd045c704d38db9450d560c46759 (HEAD -> master, tag: version)
Author: manish <manishhammagi@gmail.com>
Date: Tue Aug 6 12:35:08 2024 +0530

adding file6
```

git reset -soft:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git reset --soft head~1

DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file: file6
```

git reset -mixed:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git reset --mixed head~1

DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git status
On branch master
Untracked files:
    (use "git add <file>..." to include in what will be committed)
        file5
        file6

nothing added to commit but untracked files present (use "git add" to track)
```

git reset -hard:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git reset --hard head~1
HEAD is now at 7b6a45b adding file4
```

git rebase:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)

$ git rebase -i HEAD~3

[detached HEAD 2fe0147] Combined 3 commits

Date: Tue Aug 6 11:40:27 2024 +0530

3 files changed, 0 insertions(+), 0 deletions(-)

create mode 100644 file2

create mode 100644 file3

create mode 100644 file4

Successfully rebased and updated refs/heads/master.
```

git rm <filename>:

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ ls
file1 file2 file3 file4

DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git rm file1
rm 'file1'

DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git commit -m "deleted file1"
[master 604031e] deleted file1
1 file changed, 0 insertions(+), 0 deletions(-)
delete mode 100644 file1

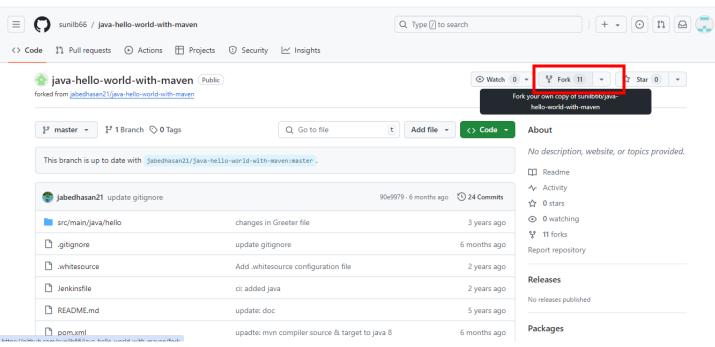
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ ls
file2 file3 file4
```

.gitignore:

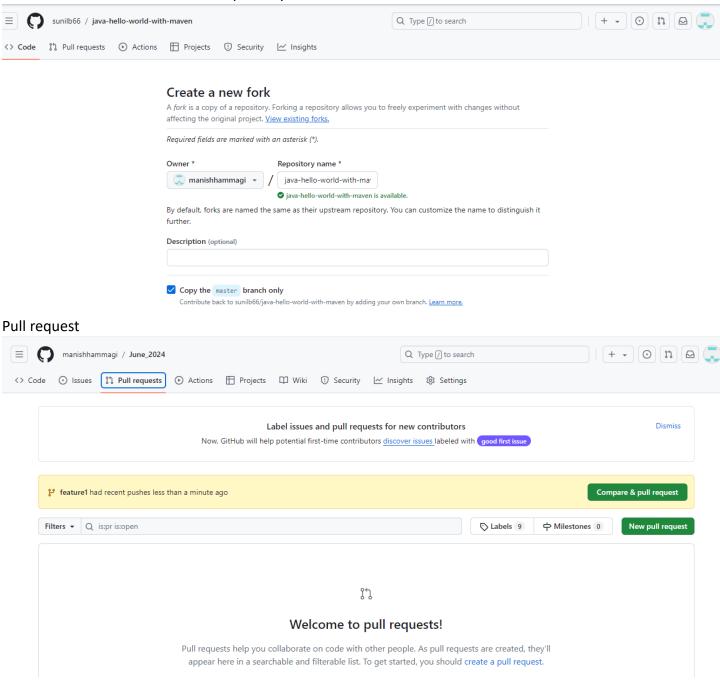
```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ vi .gitignore
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git add .gitignore
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the next time G
it touches it
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git commit -m ".gitignore
[master 3e87f8b] .gitignore
1 file changed, 1 insertion(+)
create mode 100644 .gitignore
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git status
On branch master
nothing to commit, working tree clean
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ touch 1.txt 2.txt 3.txt 4.class 5.class 6.java
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git add .
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
```

Github

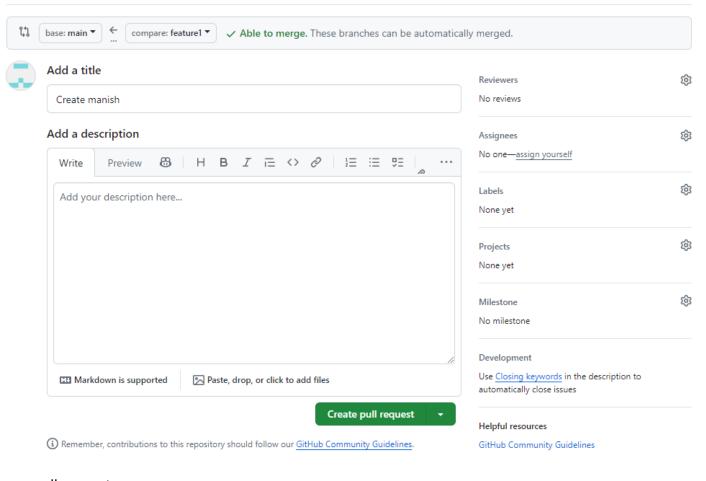
Forke



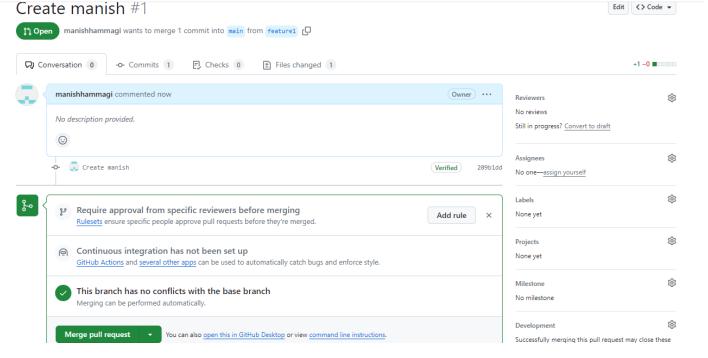
Give the name to the create new repository



Create pull request

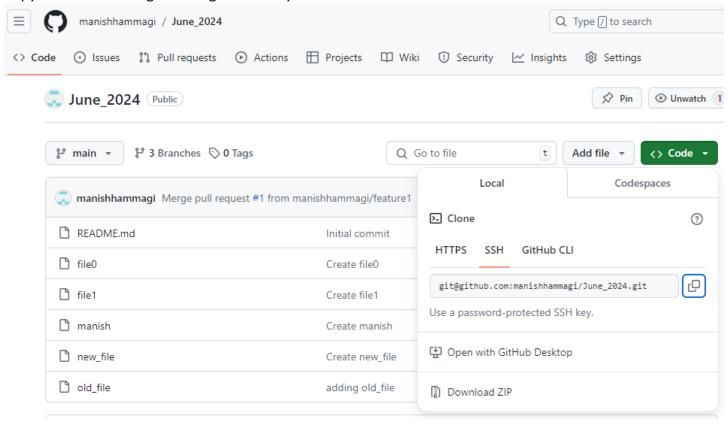


Merge pull request



Git clone:

Copy the ssh url after generating the ssh key.



```
DELL@DELL-7490CH11 MINGW64 /d/git_repo (master)

$ git clone git@github.com:manishhammagi/June_2024.git

Cloning into 'June_2024'...

remote: Enumerating objects: 18, done.

remote: Counting objects: 100% (18/18), done.

remote: Compressing objects: 100% (11/11), done.

remote: Total 18 (delta 3), reused 3 (delta 1), pack-reused 0

Receiving objects: 100% (18/18), 5.43 KiB | 370.00 KiB/s, done.

Resolving deltas: 100% (3/3), done.
```

Git push:

```
190CH11 MINGW64 /d/grt_repo/June_2024
 touch man
DELL@DELL-7490CH11 MINGW64 /d/git_repo/June_2024 (main)
$ git add man
DELL@DELL-7490CH11 MINGW64 /d/git_repo/June_2024 (main)
$ git commit -m "man"
[main 1f0d4cc] man
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 man
DELL@DELL-7490CH11 MINGW64 /d/git_repo/June_2024 (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 213 bytes | 213.00 KiB/s, done.
Total 2 (delta 1), reused O (delta O), pack-reused O (from O)
remote: Resolving deltas: 100\% (1/1), completed with 1 local object.
To github.com:manishhammagi/June_2024.git
  8a72834..1f0d4cc main -> main
branch 'main' set up to track 'origin/main'
```

Git pull

```
DELL@DELL-7490CH11 MINGW64 /d/git_repo/June_2024 (main)
$ git pull origin main
emote: Enumerating objects: 4, done.
emote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
emote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 912 bytes | 1024 bytes/s, done.
rom github.com:manishhammagi/June_2024
* branch
                               -> FETCH_HEAD
                    main
  1f0d4cc..25f9f27 main
                                -> origin/main
Updating 1f0d4cc..25f9f27
ast-forward
man_2 | 1 +
1 file changed, 1 insertion(+)
create mode 100644 man_2
```