

GIT&GITHUB TASK - 02

1. Install git.

```
[sainiharikagundu@192 ~ % git --version  
git version 2.52.0  
sainiharikagundu@192 ~ % ]
```

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

>> given name as “git-practice”
>> add README - on
>> “no .gitignore”

The screenshot shows the GitHub interface for creating a new repository. The form is divided into two main sections: General (step 1) and Configuration (step 2).

General (Step 1):

- Owner:** Sai-Gaya3
- Repository name:** git-practice (highlighted in green)
- A note says: "git-practice is available."
- Description:** A text input field with placeholder "Great repository names are short and memorable. How about potential-train?" and character count "0 / 350 characters".

Configuration (Step 2):

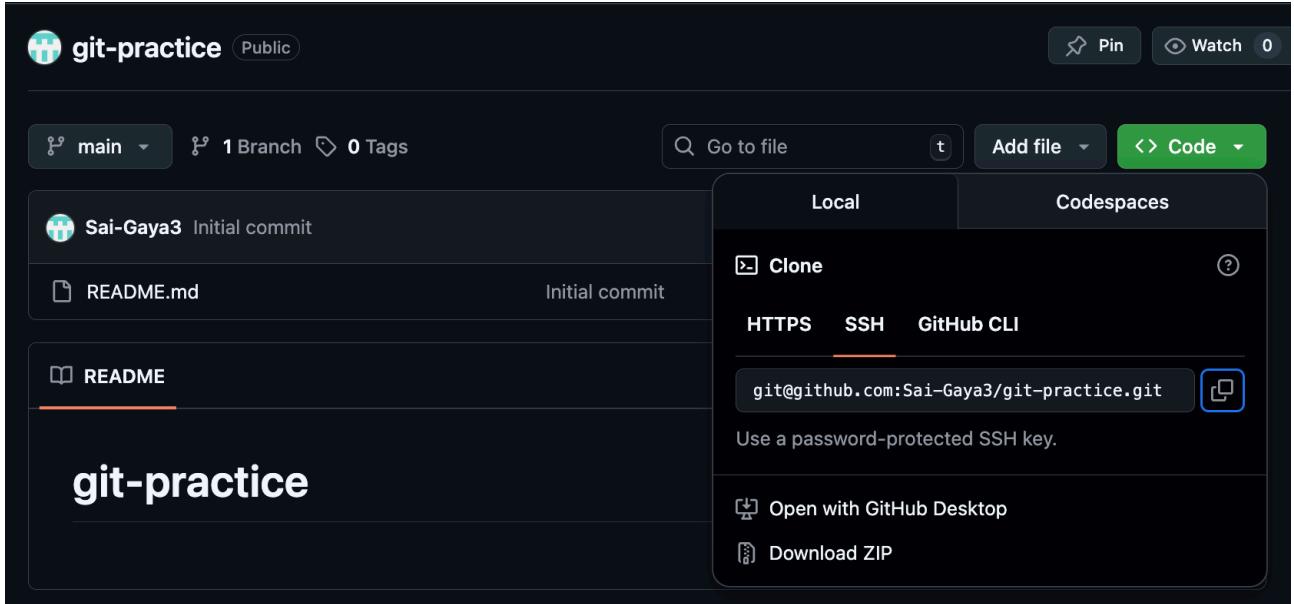
- Choose visibility:** Public (selected)
- Add README:** On (selected)
- Add .gitignore:** No .gitignore (selected)
- Add license:** No license (selected)

Buttons:

- A "Create repository" button at the bottom right.
- A search bar at the top right with placeholder "Type / to search".

3.Clone the created repo to local.

>> Here, we have copied the ssh link to copy the repository link
>> git clone <paste the copied url>



>> here, if you check the clone directory and Ls you will find same data of repository

```
[sainiharikagundu@192 gaya3 % git clone git@github.com:Sai-Gaya3/git-practice.git
Cloning into 'git-practice'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
[sainiharikagundu@192 gaya3 % ls
a          b          d          Gaya3        README.md
alphabet   c          dockerfile  git-practice
[sainiharikagundu@192 gaya3 % cd git-practice
[sainiharikagundu@192 git-practice % ls
README.md
sainiharikagundu@192 git-practice % ]
```

4. Create two files in local repo.

5. Commit two files and push to central Repository.

>> Here, we have created 2 files in local repo and added it by using “git add .” And committed by “git commit -m “added 2 files” and checked status again.

```
[sainiharikagundu@192 gaya3 % cd git-practice
[sainiharikagundu@192 git-practice % touch file1
[sainiharikagundu@192 git-practice % touch file2
[sainiharikagundu@192 git-practice % git add .
[sainiharikagundu@192 git-practice % 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:  file1
    new file:  file2

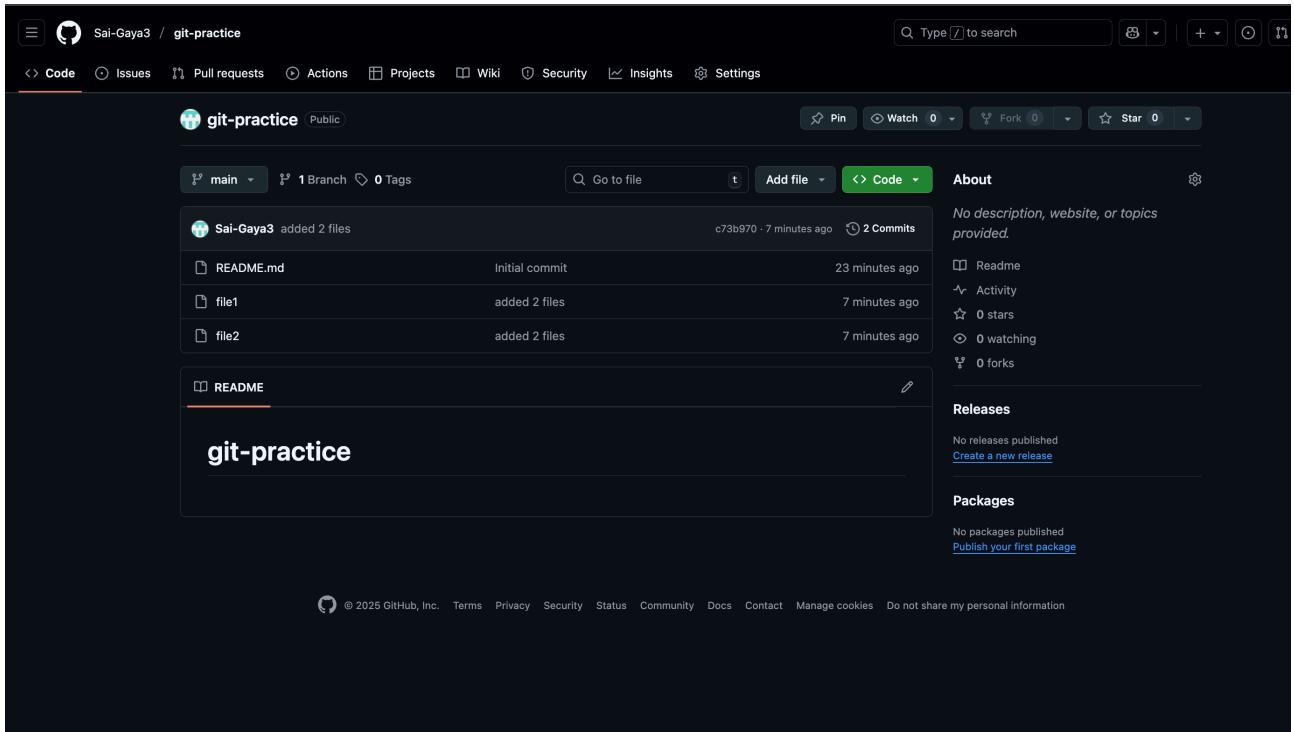
[sainiharikagundu@192 git-practice % git commit -m "added 2 files"
[main c73b970] added 2 files
  2 files changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 file1
  create mode 100644 file2
[sainiharikagundu@192 git-practice % git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
sainiharikagundu@192 git-practice %
```

>> Here, we have used “git push -u origin main” to push to the central repository

```
[sainiharikagundu@192 git-practice % ls
file1          file2          README.md
[sainiharikagundu@192 git-practice % git push -u origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 10 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 282 bytes | 282.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:Sai-Gaya3/git-practice.git
  7c74377..c73b970  main -> main
branch 'main' set up to track 'origin/main'.
sainiharikagundu@192 git-practice %
```

>> Now, we can see that the files which we created in our local repo is available now in central repository



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

>> Here, we've created a branch
>> git branch release/<branch name> - to create a branch (release is a branch name)
>> git branch --list - will show you the list of branches
>> git checkout <branch name>/release - will switch branch

```
[sainiharikagundu@192 git-practice % git branch release
[sainiharikagundu@192 git-practice % git branch --list
* main
  release
[sainiharikagundu@192 git-practice % ls
  file1          file2          README.md
[sainiharikagundu@192 git-practice % git checkout release
Switched to branch 'release'
[sainiharikagundu@192 git-practice % ls
  file1          file2          README.md
sainiharikagundu@192 git-practice % ]
```

>> here, we have created file “Loke” and committed it
>>by using “git push -u origin release” pushed to the central repo

```
[sainiharikagundu@192 git-practice % vi loke
[sainiharikagundu@192 git-practice % git status
On branch release
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    loke

nothing added to commit but untracked files present (use "git add" to track)
[sainiharikagundu@192 git-practice % git add .
[sainiharikagundu@192 git-practice % git status
On branch release
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   loke

[sainiharikagundu@192 git-practice % git commit -m "added file loke"
[release ec48dae] added file loke
  1 file changed, 1 insertion(+)
  create mode 100644 loke
[sainiharikagundu@192 git-practice % git status
On branch release
nothing to commit, working tree clean
[sainiharikagundu@192 git-practice % git push -u origin release
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 10 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 284 bytes | 284.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 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/Sai-Gaya3/git-practice/pull/new/release
remote:
To github.com:Sai-Gaya3/git-practice.git
 * [new branch]      release -> release
branch 'release' set up to track 'origin/release'.
sainiharikagundu@192 git-practice %
```

git-practice

Compare & pull request

main 2 Branches 0 Tags

Find or create a branch...

Branches Tags

✓ main (default)

release

View all branches

Initial commit 43 minutes ago

added 2 files 27 minutes ago

added 2 files 27 minutes ago

>> We can see release named branch is available in central repo
>> we can see the files added in the release branch as well

git-practice

Compare & pull request

release 2 Branches 0 Tags

Go to file Add file Code

This branch is 1 commit ahead of main.

Sai-Gaya3 added file loke ec48dae · 6 minutes ago 3 Commits

README.md Initial commit 44 minutes ago

file1 added 2 files 28 minutes ago

file2 added 2 files 28 minutes ago

loke added file loke 6 minutes ago

README

git-practice

>> Branches list in Central repository

7. Create a branch in github and clone that to local.

>> here, we're using “git clone -b <branch name> <ssh url> it will copy the release branch repository

>> git branch - will show you the current branch which you're in

```
[sainiharikagundu@sainiharikagundu-OptiPlex-5090: ~] $ git clone -b gaya3 git@github.com:Sai-Gaya3/git-practice.git
[sainiharikagundu@sainiharikagundu-OptiPlex-5090: ~] $ cd git-practice
[sainiharikagundu@sainiharikagundu-OptiPlex-5090: ~] $ git branch
* gaya3
[sainiharikagundu@sainiharikagundu-OptiPlex-5090: ~] $ ls
```

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

>> Here, we are in a main branch we merged the `gaya3` named branch to main branch by using “`git merge gaya3`”. It will merge the data to present branch.

>> we can see ansible named file is merged to main branch from `gaya3` branch

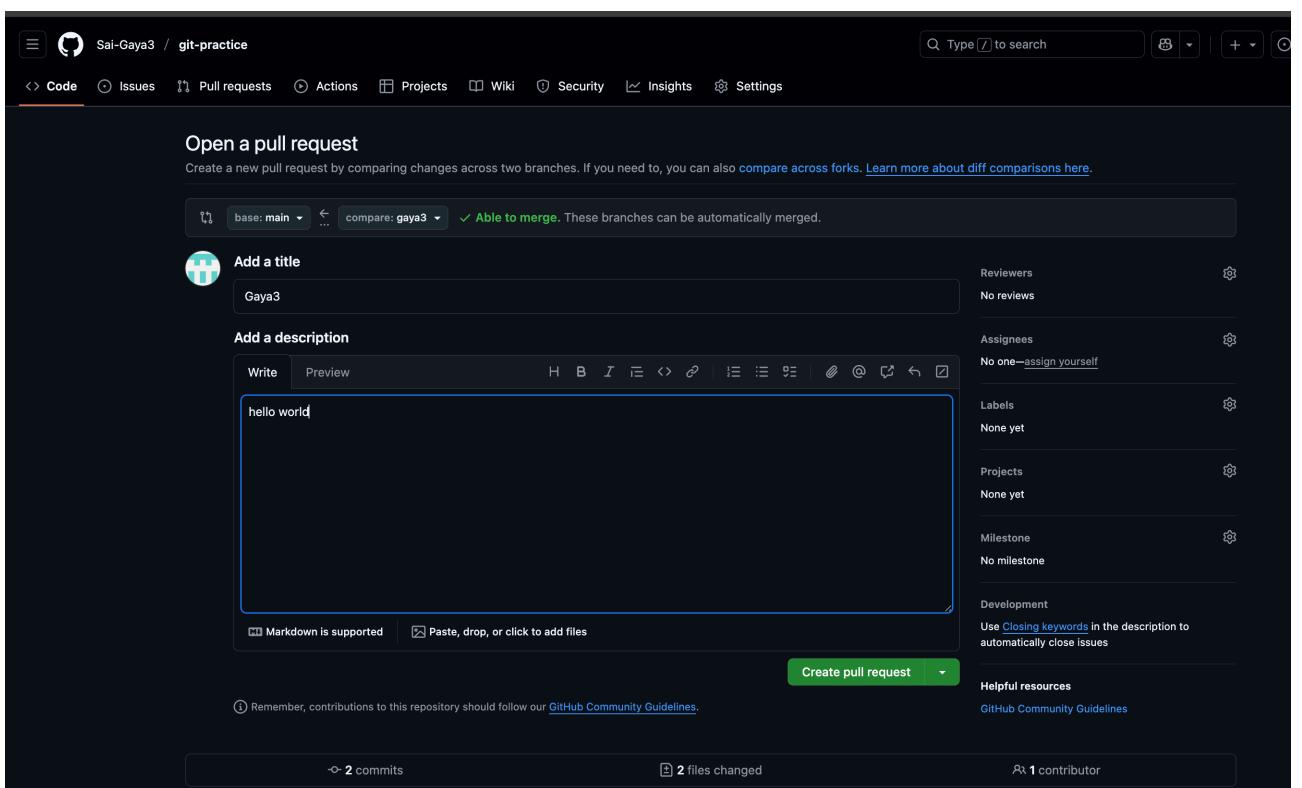
```
[sainiharikagundu@192 git-practice % git checkout main
branch 'main' set up to track 'origin/main'.
Switched to a new branch 'main'
[sainiharikagundu@192 git-practice % ls
file1          file2          README.md
[sainiharikagundu@192 git-practice % git merge gaya3
Updating c73b970..56fcf78
Fast-forward
 ansible | 1 +
 loke    | 1 +
 2 files changed, 2 insertions(+)
 create mode 100644 ansible
 create mode 100644 loke
[sainiharikagundu@192 git-practice % ls
ansible      file1      file2      loke      README.md
sainiharikagundu@192 git-practice % ]
```

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

>> “Compare & pull request” for `gaya3` → click it.

Base branch: main

Compare branch: `gaya3` Click Create pull request.



Sai-Gaya3 / git-practice

Pull requests 1

Gaya3 #1

I'm Open

Sai-Gaya3 wants to merge 2 commits into main from gaya3

Conversation 0

Commits 2

Checks 0

Files changed 2

Sai-Gaya3 commented now

hello world

Sai-Gaya3 added 2 commits 1 hour ago

added file loke

added file ansible

No conflicts with base branch

Merging can be performed automatically.

Merge pull request

Still in progress? Convert to draft

Reviewers

No reviews

Still in progress? Convert to draft

Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

None yet

Add a comment

Write Preview

Add your comment here...

Notifications

Customize

Unsubscribe

You're receiving notifications because you authored the thread.

>> confirms pull request

Commit message

Merge pull request #1 from Sai-Gaya3/gaya3

Extended description

creating pull request

This commit will be authored by saigayathriprasad305@gmail.com.

Confirm merge Cancel

Still in progress? Convert to draft

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

None yet

Notifications

Customize

Unsubscribe

You're receiving notifications because you authored the thread.

1 participant

>> successfully merged the branch in central repo

The screenshot shows a GitHub pull request merge confirmation page. At the top, a purple banner indicates the pull request has been merged. Below the banner, the main content area shows the commit history: a comment from 'Sai-Gaya3' saying 'hello world', followed by two commits from 'Sai-Gaya3' adding files 'loke' and 'ansible'. A message at the bottom of the commit list states 'Pull request successfully merged and closed' and suggests deleting the branch. On the right side, there are various settings sections for the pull request, including Reviewers, Assignees, Labels, Projects, Milestone, Development, Notifications, and Participants. The notifications section includes an 'Unsubscribe' button. At the bottom, there is a note about following GitHub Community Guidelines.

>> now, we can see ansible named file is available in main branch as well

The screenshot shows the GitHub repository page for 'git-practice'. The repository is public and has 3 branches and 0 tags. The 'main' branch is selected. The commit history shows five commits from 'Sai-Gaya3': 'Merge pull request #1 from Sai-Gaya3/gaya3' (9b6d35c, 2 minutes ago), 'README.md' (Initial commit, 2 hours ago), 'ansible' (added file ansible, 26 minutes ago), 'file1' (added 2 files, 2 hours ago), 'file2' (added 2 files, 2 hours ago), and 'loke' (added file loke, 1 hour ago). The repository page also includes sections for 'About' (no description, website, or topics provided), 'Releases' (no releases published), and 'Packages' (no packages published). The footer of the page contains standard GitHub links and copyright information.

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

```
>> touch docker - created file  
>> git add . - added file  
>> git commit -m "added file docker in gaya3" - committed the file  
>> git push -u origin gaya3 - pushed to central repo
```

```
[sainiharikagundu@192 git-practice % ls  
ansible          file1          file2          loke          README.md  
[sainiharikagundu@192 git-practice % touch docker  
[sainiharikagundu@192 git-practice % git add .  
[sainiharikagundu@192 git-practice % git commit -m "added file docker in gaya3"  
[main 2090225] added file docker in gaya3  
 1 file changed, 0 insertions(+), 0 deletions(-)  
 create mode 100644 docker  
[sainiharikagundu@192 git-practice % git push -u origin gaya3  
branch 'gaya3' set up to track 'origin/gaya3'.  
Everything up-to-date  
sainiharikagundu@192 git-practice %
```

>> here, we can see the docker file in gaya3 branch

The screenshot shows a GitHub repository named 'git-practice'. The 'gaya3' branch is selected. The repository has 3 branches and 0 tags. The 'About' section indicates there is no description, website, or topics provided. The 'Code' tab is active, showing 5 commits:

- Sai-Gaya3 added file docker in gaya3 (dedc86d · now)
- Initial commit (README.md) (2 hours ago)
- added file ansible (ansible) (39 minutes ago)
- added file docker in gaya3 (docker) (now)
- added 2 files (file1) (2 hours ago)
- added 2 files (file2) (2 hours ago)
- added file loke (loke) (2 hours ago)

The 'About' section also lists 0 stars, 0 forks, and 0 releases. The 'Packages' section indicates no packages have been published.

11. Clone only a branch from github to local.

>> git clone -b gaya3 <ssh url>

>> here, “-b gaya3” means it will clone to gaya3 named branch.

The screenshot shows a GitHub repository page for 'git-practice'. The repository has 3 branches and 0 tags. The 'gaya3' branch is selected, showing 1 commit ahead of and 1 commit behind the 'main' branch. The commit history for 'gaya3' includes:

- Sai-Gaya3 added file docker in gaya3 (dedc86d - 6 minutes ago)
- Initial commit (2 hours ago)
- added file ansible (44 minutes ago)
- added file docker in gaya3 (6 minutes ago)
- added 2 files (2 hours ago)
- added 2 files (2 hours ago)
- added file loke (2 hours ago)

The 'About' section notes 'No description, website, or topics provided.' It also lists 'Readme', 'Activity', '0 stars', '0 watching', and '0 forks'. The 'Releases' and 'Packages' sections are empty.

```
[sainiharikagundu@192 git-practice % git clone -b gaya3 git@github.com:Sai-Gaya3/git-practice.git
Cloning into 'git-practice'...
remote: Enumerating objects: 15, done.
remote: Counting objects: 100% (15/15), done.
remote: Compressing objects: 100% (8/8), done.
Receiving objects: 100% (15/15), done.
Resolving deltas: 100% (3/3), done.
remote: Total 15 (delta 3), reused 10 (delta 2), pack-reused 0 (from 0)
[sainiharikagundu@192 git-practice % ls
ansible      docker      file1      file2      git-practice      loke      README.md
[sainiharikagundu@192 git-practice % cd git-practice
[sainiharikagundu@192 git-practice % ls
ansible      docker      file1      file2      loke      README.md
[sainiharikagundu@192 git-practice % ]
```

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

>> Here, we've created a file named "passwords.txt" and ignored it in ".gitignore"
>> we can confirm it by giving "git status" as it is showing nothing to commit means the file got ignored

```
[sainiharikagundu@192 git-practice % touch passwords.txt
[sainiharikagundu@192 git-practice % vi passwords.txt
[sainiharikagundu@192 git-practice % vi .gitignore
[sainiharikagundu@192 git-practice % git add .
[sainiharikagundu@192 git-practice % git commit -m "ignore passwords file"
[gaya3 95596e2] ignore passwords file
 1 file changed, 1 insertion(+)
 create mode 100644 .gitignore
[sainiharikagundu@192 git-practice % ls
ansible      docker      file1      file2      loke      passwords.txt  README.md
[sainiharikagundu@192 git-practice % cat .gitignore
passwords.txt
[sainiharikagundu@192 git-practice % git status
On branch gaya3
Your branch is ahead of 'origin/gaya3' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
sainiharikagundu@192 git-practice % ]
```

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

>> Here, we have created a file, added it and committed it
>> we've used "git reset —hard HEAD~1" to commit reset by checking git log we've confirmed that the file has been reset.

```
[sainiharikagundu@192 git-practice % touch file3
[sainiharikagundu@192 git-practice % git add .
[sainiharikagundu@192 git-practice % git commit -m "added file3"
[gaya3 d49d957] added file3
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 file3
[sainiharikagundu@192 git-practice % git log
commit d49d957389be3e6dc2c179c665fafaf73a206363 (HEAD -> gaya3)
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 17:28:18 2025 +0530

  added file3

commit 95596e2e6df00101385454b8a713142751b81c
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 17:22:03 2025 +0530

  ignore passwords file
```

```
[sainiharikagundu@192 git-practice % git log
commit 95596e2e6dfee20101385454b8a713142751b81c (HEAD -> gaya3)
Author: sai gayathri <saigayathripasad305@gmail.com>
Date:   Wed Dec 10 17:22:03 2025 +0530

    ignore passwords file

commit dedc86d4c46fc54c38f51d005ec839a535635ead (origin/gaya3)
Author: sai gayathri <saigayathripasad305@gmail.com>
Date:   Wed Dec 10 15:18:32 2025 +0530

    added file docker in gaya3
```

14. Revert a committed commit to the older version.

```
[sainiharikagundu@192 git-practice % ls
ansible      docker      file1      file2      loke      passwords.txt  README.md
[sainiharikagundu@192 git-practice % rm docker
[sainiharikagundu@192 git-practice % git add .
[sainiharikagundu@192 git-practice % git commit -m "deleted docker file"
[gaya3 b946557] deleted docker file
 1 file changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 docker
[sainiharikagundu@192 git-practice % git log
commit b94655717af40a162aa6a69bd5e1a76947295b5e (HEAD -> gaya3)
Author: sai gayathri <saigayathripasad305@gmail.com>
Date:   Wed Dec 10 17:39:17 2025 +0530

  deleted docker file
```

```
Revert "deleted docker file"

This reverts commit b94655717af40a162aa6a69bd5e1a76947295b5e.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch gaya3
# Your branch is ahead of 'origin/gaya3' by 2 commits.
#   (use "git push" to publish your local commits)
#
# Changes to be committed:
#       new file:   docker
#
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~
```

>> here, we can see the file has been reverted successfully by using “git revert <commit id>”.

```
[sainiharikagundu@192 git-practice % ls
ansible          file1          file2          loke          passwords.txt  README.md
[sainiharikagundu@192 git-practice % git revert b94655
[gaya3 4321084] Revert "deleted docker file"
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 docker
[sainiharikagundu@192 git-practice % ls
ansible          docker          file1          file2          loke          passwords.txt  README.md
sainiharikagundu@192 git-practice %
```

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

>>here we've created a file named “techie”, added it and checked the status
>> if I want to work on other file then we've used “git stash” it will save the working directory and will be used as temporary stash memory

```
[sainiharikagundu@192 git-practice % vi techie
[sainiharikagundu@192 git-practice % git add .
[sainiharikagundu@192 git-practice % git status
On branch gaya3
Your branch is ahead of 'origin/gaya3' by 3 commits.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:  techie

[sainiharikagundu@192 git-practice % git stash
Saved working directory and index state WIP on gaya3: 4321084 Revert "deleted docker file"
[sainiharikagundu@192 git-practice % ls
ansible          docker          file1          file2          loke          passwords.txt  README.md
[sainiharikagundu@192 git-practice % vi hello
[sainiharikagundu@192 git-practice % git add .
[sainiharikagundu@192 git-practice % git commit -m "hello file"
[gaya3 1522442] hello file
  1 file changed, 1 insertion(+)
 create mode 100644 hello
[sainiharikagundu@192 git-practice % ls
ansible          docker          file1          file2          hello          loke          passwords.txt  README.md
sainiharikagundu@192 git-practice %
```

16. Undo the stash file and start working on that again.

>> Here, now I want to continue my previous unfinished work of techie file We can use command “git stash pop”
>> git stash list - will show you the files which are in stash memory
>> git stash pop - will resume the file again

```
[sainiharikagundu@192 git-practice % git stash list
stash@{0}: WIP on gaya3: 4321084 Revert "deleted docker file"
[sainiharikagundu@192 git-practice % git stash pop
On branch gaya3
Your branch is ahead of 'origin/gaya3' by 4 commits.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:  techie

Dropped refs/stash@{0} (98726c0e8ed71530bcb3bc93e06d18bb9a13e599)
sainiharikagundu@192 git-practice %
```

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

>> “ssh-keygen” will create the ssh key and copy the pub key by cat command.

```
[sainiharikagundu@192 git-practice % ssh-keygen
Generating public/private ed25519 key pair.
Enter file in which to save the key (/Users/sainiharikagundu/.ssh/id_ed25519): yes
[Enter passphrase for "yes" (empty for no passphrase):
[Enter same passphrase again:
Your identification has been saved in yes
Your public key has been saved in yes.pub
The key fingerprint is:
SHA256:BKwIVbf4fdC7Lf03f30P8FGdrBf3lSJhJYn8bs90Cp4 sainiharikagundu@192.168.0.105
The key's randomart image is:
+--[ED25519 256]--+
| ....o . .... |
| . o.o + .o |
| . .... o oo |
| . . o ..o . + |
| . S +. . ==|
| . B..oo=|
| = X.+..|
| E B.=+|
| +.X|
+---[SHA256]---+
[sainiharikagundu@192 git-practice % cat /Users/sainiharikagundu/.ssh/id_ed25519
-----BEGIN OPENSSH PRIVATE KEY-----
b3BlbnNzaC1rZXktdjEAAAABG5vbmcUAAAEBm9uZQAAAAAAAABAAAAMwAAAAtzc2gtZW
QyNTUxOQAAACAIuEjwDJ0iYWVGqMBSzbe06mlxNxOCWP+5oE29taUP7gAAAKhfcR2oX3Ed
qAAAAAtzc2gtZWQyNTUxOQAAACAIuEjwDJ0iYWVGqMBSzbe06mlxNxOCWP+5oE29taUP7g
AAAEAdE3dTsfKApoBi6usdRAG9Zf5ieFJrNtxMz3pe1/ZM0gi4SPAMnSJhZUaowFLNt7Tq
aXE3E4JY/7mgTb21pQ/uAAAAHnNhaW5paGFyaWthZ3VuZHvAMTkyLjE20C4wLjEzMwECAw
QFBgc=
-----END OPENSSH PRIVATE KEY-----
[sainiharikagundu@192 git-practice % cat /Users/sainiharikagundu/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAIAAi4SPAMnSJhZUaowFLNt7TqaXE3E4JY/7mgTb21pQ/u sainiharikagundu@192.168.0.133
sainiharikagundu@192 git-practice %
```

19. Basic understanding of .git file.

>> When we run `git init .`, Git creates a hidden directory named `.git`.

Every Git repository contains this hidden `.git` folder.

You can verify its presence by running `ls -a`.

```
[sainiharikagundu@192 git-practice % ls -a
.          .git        ansible      file1      hello      passwords.txt  techie      yes.pub
..         .gitignore   docker       file2      loke       README.md    yes
[sainiharikagundu@192 git-practice % cd .git/
[sainiharikagundu@192 .git % ls
AUTO_MERGE  config      HEAD        index      logs      ORIG_HEAD     refs
COMMIT_EDITMSG description hooks      info       objects    packed-refs
sainiharikagundu@192 .git %
```

What's Inside the `.git` Folder?

The `.git` directory is the heart of every Git repository. It contains all the metadata, configuration, and history that Git needs to track your project.

1. HEAD

- A small file that indicates which branch you are currently on.
- Examples: `master`, `main`, `gaya3`.

2. config

- Contains repository-level settings such as:
 - `username`
 - `email`
 - `remote origin URL`

3. branches/

- A legacy directory (rarely used now).
- Previously stored old branch pointers.

4. refs/

This folder stores references (pointers) to commits.

Inside it:

a) refs/heads/

- Contains the latest commit ID for each branch.

- Examples:
 - `main`
 - `gaya3`
 - `release`

b) refs/tags/

- Stores pointers for tags.

5. info/

- Contains the `exclude` file, which works like a local `.gitignore`.

6. objects/

- The most important part of `.git`.
- Stores all actual Git data:
 - commits
 - files (compressed)
 - trees (directories)
 - blobs (file contents)

Every commit you make is stored as an object inside this folder.

Important Note About `.git`

Do **not** delete the `.git` folder.

If you delete it, your project becomes a normal folder and **all Git history is permanently lost**.

20. Check all the logs of git.

```
[sainiharikagundu@192 git-practice % git log
commit 1522442be63fc3ed20cd69f90f84c61c1d7efd9 (HEAD -> gaya3)
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 17:52:55 2025 +0530

    hello file

commit 4321084e1841678746fd9a206a7a870673548a00
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 17:40:29 2025 +0530

    Revert "deleted docker file"

    This reverts commit b94655717af40a162aa6a69bd5e1a76947295b5e.

commit b94655717af40a162aa6a69bd5e1a76947295b5e
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 17:39:17 2025 +0530

    deleted docker file

commit 95596e2e6df0020101385454b8a713142751b81c
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 17:22:03 2025 +0530

    ignore passwords file

commit dedc86d4c46fc54c38f51d005ec839a535635ead (origin/gaya3)
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 15:18:32 2025 +0530

    added file docker in gaya3

commit 56fcf7838d34f11cd0bd237373e2632abfcfbcee
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 14:39:58 2025 +0530

    added file ansible

commit ec48daee3bb2da0c778fef7827d53d8dc6ab2ab6 (origin/release)
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 13:22:02 2025 +0530

    added file loke

commit c73b9700f91045f07d21be6d4a1f55ea1466c4f1
Author: sai gayathri <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 12:59:31 2025 +0530

    added 2 files

commit 7c74377be1cc316582d9a0a228a7b353fc08251
Author: Sai-Gaya3 <saigayathripurasad305@gmail.com>
Date:   Wed Dec 10 12:43:18 2025 +0530

    Initial commit
sainiharikagundu@192 git-practice % █
```

21. Rename a commit message.

>> we can edit commit message by using “git commit —amend”, it’ll open the commit msg we can rename it. However, we should not play with commit’s not recommended.

>> here, in first log it is showing “hello file”

```
[sainiharikagundu@192 git-practice % git log
commit 1522442be63fcd3ed20cd69f90f84c61c1d7efd9 (HEAD -> gaya3)
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 17:52:55 2025 +0530

    hello file

commit 4321084e1841678746fd9a206a7a870673548a00
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 17:40:29 2025 +0530

    Revert "deleted docker file"

This reverts commit b94655717af40a162aa6a69bd5e1a76947295b5e.
```

>> now here, it has been changed to “changed the commit message”

```
[sainiharikagundu@192 git-practice % git log -3
commit f9bb8811f908fcc5605877ac3b5bf902f7dec946 (HEAD -> gaya3)
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 17:52:55 2025 +0530

    changed the commit message

commit 4321084e1841678746fd9a206a7a870673548a00
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 17:40:29 2025 +0530

    Revert "deleted docker file"

This reverts commit b94655717af40a162aa6a69bd5e1a76947295b5e.
```

