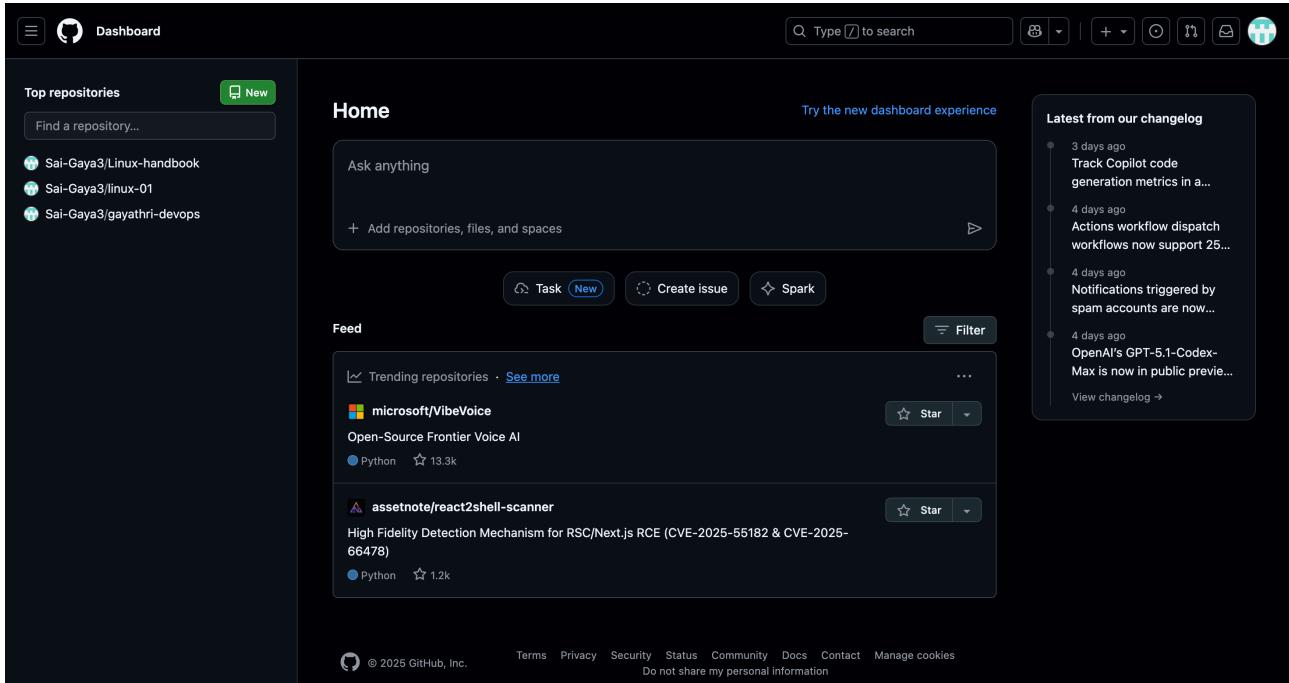


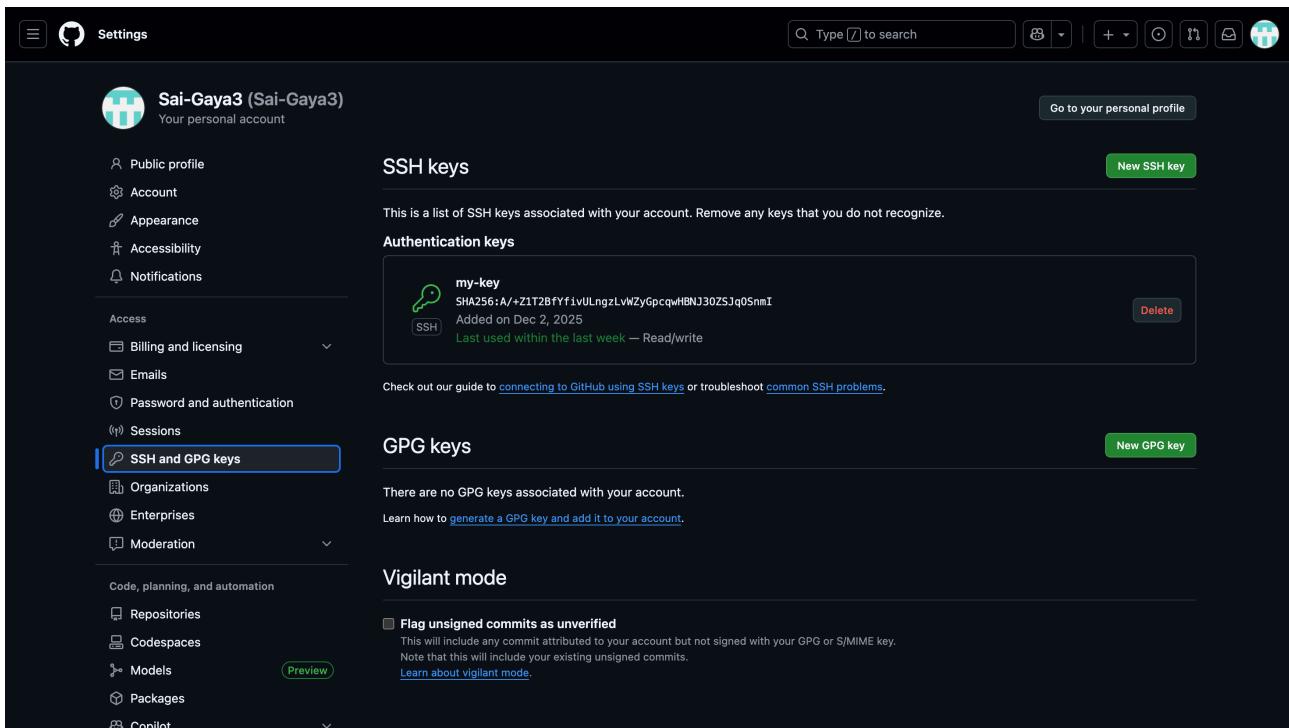
GIT & GITHUB - 1

1. Create a GitHub account.

>> created Github account



2. Key generated using ssh-keygen for ssh



3. Executing all the commands from video

```
[sainiharikagundu@192 ~ % mkdir gaya3
[sainiharikagundu@192 ~ % cd gaya3
[sainiharikagundu@192 gaya3 % git status
warning: could not open directory 'Music/Music/': Operation not permitted
warning: could not open directory '.Trash/': Operation not permitted
On branch main

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .../.CFUserTextEncoding
    .../.DS_Store
    .../.bash_history
    .../.config/
    .../.ipython/
    .../.mysql_history
    .../.ssh/
    .../.viminfo
    .../.vscode/
    .../.zprofile
    .../.zsh_history
    .../.zsh_sessions/
    .../Applications/
    .../Desktop/
    .../Documents/
    .../Downloads/
    .../Library/
    .../Linux-handbook/
    .../Movies/
    .../Music/
    .../Pictures/
    .../Public/
    .../PyCharmMiscProject/
    .../PycharmProjects/
    .../gaya3_file
    .../jcef_1893.log
    .../jcef_7615.log
    .../marks.txt
    .../people.file
    .../people.txt
    .../people.file
    .../people.txt
    .../techie.f
    .../test.file

It took 16.52 seconds to enumerate untracked files.
See 'git help status' for information on how to improve this.

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

>> Here, “git init” command is used to create a new Git repository in our current directory

```
[sainiharikagundu@192 gaya3 % git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: will change to "main" in Git 3.0. To configure the initial branch name
hint: to use in all of your new repositories, which will suppress this warning,
hint: call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
hint:
hint: Disable this message with "git config set advice.defaultBranchName false"
Initialized empty Git repository in /Users/sainiharikagundu/gaya3/.git/
sainiharikagundu@192 gaya3 %
```

>> Here, ls -a to check the repository exist or not because it is hidden

```
[sainiharikagundu@192 gaya3 %  
[sainiharikagundu@192 gaya3 % ls -a  
. .. .git  
[sainiharikagundu@192 gaya3 % ls -alF  
total 0  
drwxr-xr-x 3 sainiharikagundu staff 96 8 Dec 18:55 ./  
drwxr-x---+ 40 sainiharikagundu staff 1280 8 Dec 18:53 ../  
drwxr-xr-x 9 sainiharikagundu staff 288 8 Dec 18:55 .git/  
sainiharikagundu@192 gaya3 %
```

>> Here, we have created a file “Dockerfile” by using “touch” command in our new repository and checked whether the file got added by using “git status” it is not added so, the command “git add <filename>” will help you to add the file. To add multiple files we need to use “git add .”

git add <filename> = will add the single file

git add . = will add the multiple files

git status = will show you the status

```
[sainiharikagundu@192 gaya3 % touch dockerfile  
[sainiharikagundu@192 gaya3 % git status  
On branch master  
  
No commits yet  
  
Untracked files:  
(use "git add <file>..." to include in what will be committed)  
  dockerfile  
  
nothing added to commit but untracked files present (use "git add" to track)  
[sainiharikagundu@192 gaya3 % git add dockerfile  
[sainiharikagundu@192 gaya3 % git status  
On branch master  
  
No commits yet  
  
Changes to be committed:  
(use "git rm --cached <file>..." to unstage)  
  new file:  dockerfile  
  
sainiharikagundu@192 gaya3 %
```

```
[sainiharikagundu@192 gaya3 % git status
On branch master

No commits yet

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

[sainiharikagundu@192 gaya3 % touch a b c d
[sainiharikagundu@192 gaya3 % git status
On branch master

No commits yet

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

Untracked files:
(use "git add <file>..." to include in what will be committed)
  a
  b
  c
  d

[sainiharikagundu@192 gaya3 % git add .
[sainiharikagundu@192 gaya3 % git status
On branch master

No commits yet

Changes to be committed:
(use "git rm --cached <file>..." to unstage)
  new file:  a
  new file:  b
  new file:  c
  new file:  d
  new file:  dockerfile

sainiharikagundu@192 gaya3 %
```

```
[sainiharikagundu@192 gaya3 % git commit -m "added some files"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
sainiharikagundu@192 gaya3 %
```

List of git commands

...or create a new repository on the command line

```
echo "# techie_horizon06" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/Sai-Gaya3/techie_horizon06.git
git push -u origin main
```

...or push an existing repository from the command line

```
git remote add origin https://github.com/Sai-Gaya3/techie_horizon06.git
git branch -M main
git push -u origin main
```

>> Here, We have created a repository in our GitHub account and copied the ssh key remote

The screenshot shows a GitHub repository page for 'techie_horizon06'. At the top, there's a search bar and navigation links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the header, there's a 'Pin' button and a 'Watch' button with 0 notifications, a 'Fork' button with 0 forks, and a 'Star' button with 0 stars. The repository name 'techie_horizon06' is displayed, along with its status as 'Public'. On the left, there's a 'Set up GitHub Copilot' section with a 'Get started with GitHub Copilot' button. On the right, there's a 'Add collaborators to this repository' section with a 'Invite collaborators' button. A large blue banner at the bottom provides 'Quick setup — if you've done this kind of thing before' with options to 'Set up in Desktop' or 'HTTPS / SSH' and a link to the repository's URL (https://github.com/Sai-Gaya3/techie_horizon06.git). It also suggests starting by creating a new file or uploading an existing file, and recommends including a `README`, `LICENSE`, and `.gitignore`. Below this banner, there are two sections for command-line instructions: one for creating a new repository ('...or create a new repository on the command line') and another for pushing an existing repository ('...or push an existing repository from the command line'). Both sections provide the same set of git commands shown in the first two boxes.

...or create a new repository on the command line

```
echo "# techie_horizon06" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/Sai-Gaya3/techie_horizon06.git
git push -u origin main
```

...or push an existing repository from the command line

```
git remote add origin https://github.com/Sai-Gaya3/techie_horizon06.git
git branch -M main
git push -u origin main
```

>> The command “git remote -v” will show the remote repositories linked to your local Git project.

>> git remote add origin (ssh url paste here) / git remote set-url origin

>> The command git remote add origin will link your local Git repository to a remote repository.

>> we have linked to our repository

```
[sainiharikagundu@192 gaya3 % git remote -v
origin git@github.com:Sai-Gaya3/gayathri-devops.git (fetch)
origin git@github.com:Sai-Gaya3/gayathri-devops.git (push)
[sainiharikagundu@192 gaya3 % git remote add origin git@github.com:Sai-Gaya3/techie_horizon06.git
error: remote origin already exists.
[sainiharikagundu@192 gaya3 % git remote -v
origin git@github.com:Sai-Gaya3/gayathri-devops.git (fetch)
origin git@github.com:Sai-Gaya3/gayathri-devops.git (push)
[sainiharikagundu@192 gaya3 % git remote set-url origin git@github.com:Sai-Gaya3/techie_horizon06.git
[sainiharikagundu@192 gaya3 % git remote -v
origin git@github.com:Sai-Gaya3/techie_horizon06.git (fetch)
origin git@github.com:Sai-Gaya3/techie_horizon06.git (push)
sainiharikagundu@192 gaya3 % ]
```

>> “git push -u origin main”

>> We have pushed the files from local repository to remote repository. The command git push origin master will upload (push) our local commits to the remote repository specifically to the main/master branch.

```
[sainiharikagundu@192 gaya3 % git push -u origin main
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 10 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (9/9), 741 bytes | 741.00 KiB/s, done.
Total 9 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), done.
To github.com:Sai-Gaya3/techie_horizon06.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
sainiharikagundu@192 gaya3 % ]
```

>> Now check the github account repository

>> we can see all the files from our local repo in the main/master branch

The screenshot shows a GitHub repository page for a user named 'Sai Niharika Gundu'. The repository has 1 branch and 0 tags. The main branch contains 3 commits. The commits are:

- README.md: first commit, 15 hours ago
- a: added some files, 15 hours ago
- b: added some files, 15 hours ago
- c: added some files, 15 hours ago
- d: added some files, 15 hours ago
- dockerfile: added some files, 15 hours ago

The README file is currently selected. On the right side, there are sections for 'About' (DevOps stats), 'Releases' (no releases published), and 'Packages' (no packages published).

>> Here, we have removed one file

```
[sainiharikagundu@192 ~ % rm dockerfile
[sainiharikagundu@192 ~ % ls
a          b          c          d          README.md
[sainiharikagundu@192 ~ % git status
On branch main
Your branch is up to date with 'origin/main'.

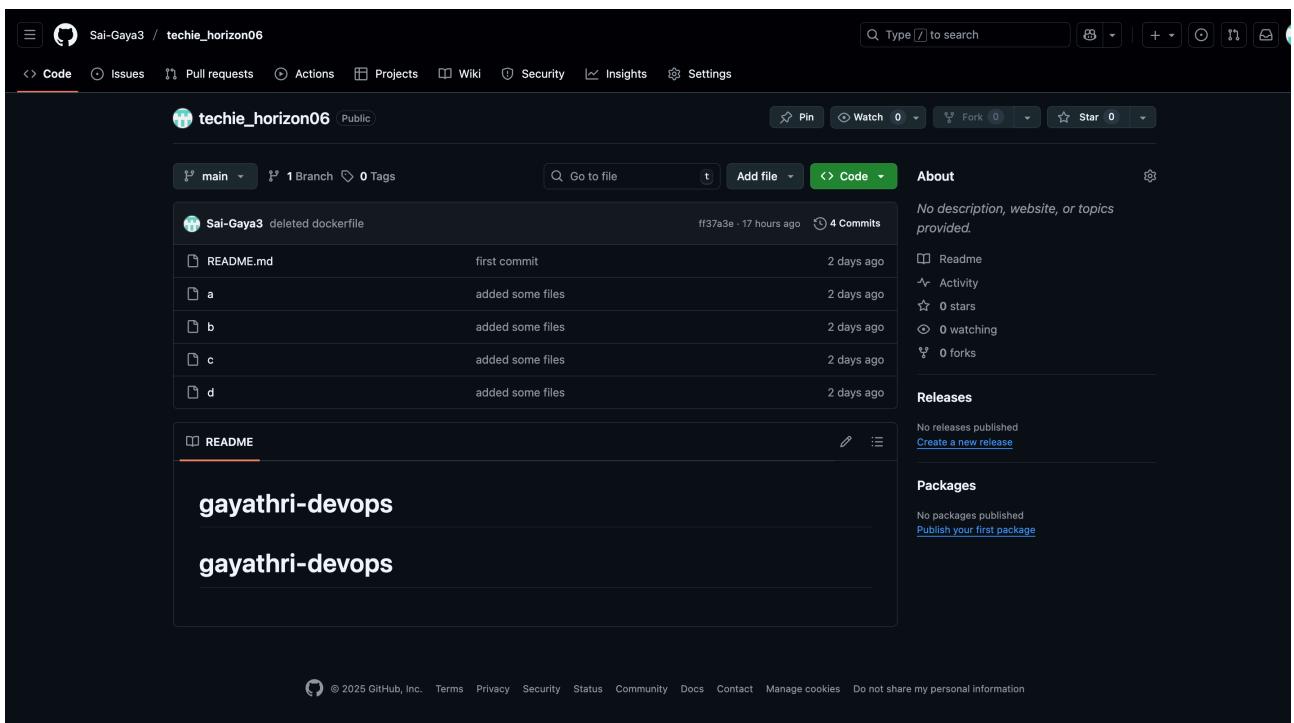
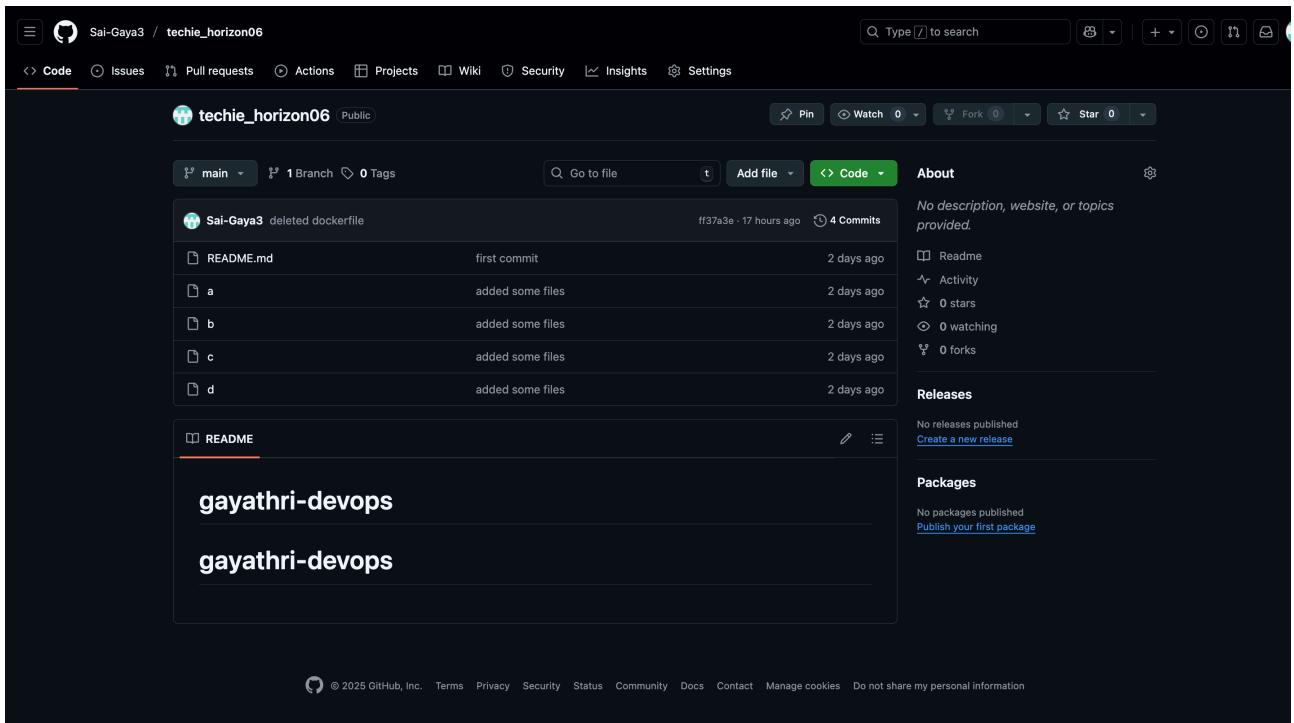
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    deleted:   dockerfile

no changes added to commit (use "git add" and/or "git commit -a")
sainiharikagundu@192 ~ %
```

>> In git status we can see the status that one file is deleted

>> git add. And We have to use git commit -m for that changes we have done

>> Now we can see that file named dockerfile deleted from repository



>> Here, we have created a file named Gaya3 in GitHub repository and we should make that available in our local git

Name	Last commit message
Gaya3	Create Gaya3
README.md	first commit
a	added some files
b	added some files
c	added some files
d	added some files

>> Here, we used command “git pull” to pull the file from central repo to our local repository

```
[sainiharikagundu@192 gaya3 % git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 929 bytes | 232.00 KiB/s, done.
From github.com:Sai-Gaya3/techie_horizon06
  ff37a3e..d29533f main      -> origin/main
Updating ff37a3e..d29533f
Fast-forward
  Gaya3 | 3 +++
  1 file changed, 3 insertions(+)
  create mode 100644 Gaya3
[sainiharikagundu@192 gaya3 % ls
a              b              c              d              dockerfile          Gaya3          README.md
```

>> git clone The command `git clone` is used to download (copy) a remote Git repository — like one from GitHub — to your local computer.

```
[sainiharikagundu@192 gaya3 % git clone git@github.com:Sai-Gaya3/techie_horizon06.git
Cloning into 'techie_horizon06'...
remote: Enumerating objects: 14, done.
remote: Counting objects: 100% (14/14), done.
remote: Compressing objects: 100% (7/7), done.
Receiving objects: 100% (14/14), done.
Resolving deltas: 100% (4/4), done.
remote: Total 14 (delta 4), reused 11 (delta 3), pack-reused 0 (from 0)
[sainiharikagundu@192 gaya3 % ls
a              b              c              d              dockerfile          Gaya3          README.md          techie_horizon06
```

>> git log - git log is used to view the commit history of your git repository

```
[sainiharikagundu@192 gaya3 % git log
commit d29533f0306df574ec040b91c9648e4886f69a46 (HEAD -> main, origin/main, origin/HEAD)
Author: Sai-Gaya3 <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 12:06:25 2025 +0530

    Create Gaya3

commit ff37a3ef83860c46296d262108fc2c7586bede82
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Tue Dec 9 19:00:56 2025 +0530

    deleted dockerfile

commit 70875e3e0a85bea8cd6e8c5f07ab5bec3591f5bf
Author: Sai Niharika Gundu <sainiharikagundu@192.168.0.137>
Date:   Mon Dec 8 20:02:57 2025 +0530

    first commit

commit a94bd59ac3cc0510b89df931b7c23edd909bdc32
Author: Sai Niharika Gundu <sainiharikagundu@192.168.0.137>
Date:   Mon Dec 8 20:01:31 2025 +0530

    first commit

commit c5b08841080b284e7c1e2b9c082e64953832290a
Author: Sai Niharika Gundu <sainiharikagundu@192.168.0.137>
Date:   Mon Dec 8 19:55:27 2025 +0530

    added some files
sainiharikagundu@192 gaya3 % ]
```

>> git reset - the command `git reset` is used to undo changes in Git — you can use it to move backwards to a previous commit, unstage files, or even erase commits.

```
[sainiharikagundu@192 gaya3 % git add .
[sainiharikagundu@192 gaya3 % 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:  alphabet
    new file:  dockerfile
    new file:  techie_horizon06

[sainiharikagundu@192 gaya3 % git reset
[sainiharikagundu@192 gaya3 % 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)
    alphabet
    dockerfile
    techie_horizon06/

nothing added to commit but untracked files present (use "git add" to track)
sainiharikagundu@192 gaya3 % ]
```

