

git log

```
commit 1ca705cca134b85643c6f94694fd1699c279bd88 (HEAD -> main, origin/main, origin/HEAD)
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 15:16:39 2025 +0530

    added new line in all files and committing except intro.txt

commit 341eb2ac3957c1b043c9b7af3306ae33d997e891
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 15:02:53 2025 +0530

    added new line again

commit ff94eb33195cd9854b7ca627c15575081993d58f
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 15:00:50 2025 +0530

    added new line again

commit 6d0a034f2362e04be3b3355f5b95a7f0a52b132b
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 14:58:45 2025 +0530

    added new line

commit 60b19d5b05c154abe27a519c68d9c113a795e1c9
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 14:52:38 2025 +0530

    updated test-file-1.txt

commit 012d340fdd4b4df9a255b0c76a6203bcb7a768f5
Merge: 5d8b23f 94dd1b2
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 11:33:56 2025 +0530

    Merge branch 'main' of https://github.com/vaish1999/Amazon-Atlas-Batch-2
    this merge is okay to go

commit 5d8b23ffc08d809123d8c78ca53715118869fe4d
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 11:33:32 2025 +0530

    pushing test file 1.txt

commit 94dd1b2b7a649d0a3193528705845da4e884cc68
Author: Vaishakh Nargund <55920077+vaish1999@users.noreply.github.com>
Date: Sat May 17 11:32:57 2025 +0530

    Delete test-file-2.txt

commit 8dfc7183fdf075849d093017f30582de30c7d927
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 11:31:24 2025 +0530

    pushing test file 1.txt

commit 3d568e3742674beb26bf635838045db99c392d2b
Author: Vaishakh Nargund <vaishakh.nargund1999@gmail.com>
Date: Sat May 17 11:16:50 2025 +0530

    first push
```

git branch commands

```
Administrator@A8081980C37D52F MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2
h-2 (main)
$ git branch
* main

Administrator@A8081980C37D52F MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2
h-2 (main)
$ git branch new-branch
* main
  new-branch

Administrator@A8081980C37D52F MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2
h-2 (main)
$ git checkout new-branch
M      intro.txt
Switched to branch 'new-branch'

Administrator@A8081980C37D52F MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2
h-2 (new-branch)
```

git revert

```
MINGW64:/d/test-git-lab-practice/Amazon-Atlas-Batch-2
Revert "wrong commit" [please ignore this commit]

[main 6f64fb8] Revert "wrong commit" (please ignore this commit)
1 file changed, 1 deletion(-)

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$
```

git commit --amend

```
Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git commit --amend -m "comment edited"
[main 8594c83] comment edited
Date: Sat May 17 23:01:21 2025 +0530
1 file changed, 1 insertion(+)
create mode 100644 test-file-6.txt

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git push --force main
fatal: 'main' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git push --force origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 285 bytes | 285.00 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.
To https://github.com/vaish1999/Amazon-Atlas-Batch-2.git
+ 6ae76f0...8594c83 main -> main (forced update)
```

Understanding of untracked and tracked files in git

```
MINGW64/d/test-git-lab-practice/Amazon-Atlas-Batch-2
Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ ls
README.md  intro.txt  test-file-1.txt  test-file-2.txt  test-file-4.txt  test-file-5.txt  test-file-6.txt  test-push.txt

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git add test-file-6.txt

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (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:   test-file-6.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        test-file-4.txt

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git reset test-file-6.txt

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (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)
        test-file-4.txt
        test-file-6.txt

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

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git commit -m "commit"
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)
        test-file-4.txt
        test-file-6.txt

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

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git push origin main
Everything up-to-date
```

The git blame command allows you to see who last modified a specific line of code and when. This can be helpful in identifying the author of a particular bug or issue.

Example:

git blame <filename>

```
Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git blame test-file-6.txt
8594c838 (Vaishakh Nargund 2025-05-17 23:01:21 +0530 1) file 6

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$ git blame intro.txt
e81f1ecc (Vaishakh Nargund 2025-05-17 10:47:29 +0530 1) hello, this is Vaishakh Nargund
889c5c80 (Vaishakh Nargund 2025-05-17 22:22:31 +0530 2) new line

Administrator@a8081980c37d52f MINGW64 /d/test-git-lab-practice/Amazon-Atlas-Batch-2 (main)
$
```