12 Days of Git

DAY3
INSPECT A GIT REPOSITORY

There are times when you will want to check the status of a repository on your local machine, or when you want to look back at the history.

Maybe you haven't touched the repository for a few days and want to check what state you left it in.

Or maybe you have an issue and want to understand why and how to resolve it.

Git status

Git status displays the state of the working directory and the staging area. It will show you any changes which have been staged, which haven't and any files that Git is not tracking.

Git status won't show you the commit history of the repository though.

It also shows that changes on the local repository that should be pushed to the remote repository.

```
(base) → PyPi-connectdb git:(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)
nothing added to commit but untracked files present (use "git add" to track)
(base) \rightarrow PyPi-connectdb git:(main) \times git add update.py
(base) → PyPi-connectdb git:(main) X 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: update.pv
(base) \rightarrow PyPi-connectdb git:(main) \times git commit -m "chore: Updated version of package
fixed connection issues
[main 3cf29ce] chore: Updated version of package
1 file changed, 32 insertions(+)
create mode 100644 update.py
(base) → PyPi-connectdb git:(main) 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 clea<u>n</u>
(base) → PyPi-connectdb git:(main)
```

Git log

Git log is the command you want to use to see the repositories commit history.

The **space bar** to help you **scroll down** and you can **exit** it using **q**.



git log --oneline

```
git log --oneline

3cf29ce (HEAD -> main) chore: Updated version of package
7986177 (origin/main, origin/HEAD) Update README.md
fe642dc Add files via upload
00e1f5d Add files via upload
873d95b Initial commit
~
~
(END)
```

To display the last three commits for you.

git log -n 3

To see what files were altered and how many lines were added or removed for each commit

git log --stat

Git blame

Git blame is a useful command if you want to understand who authored a certain change in the history of the repository. You can't just use git blame across the repository you need to specify a specific file you want to query.

git blame README.md

```
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
                                                   # ConnectDB
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
                                                   4) Connect python with Mysql, MongoDB, Cassandra database
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
                                                   ### Installation
                                                      Run below commandto install whole package
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
                                                       ```pip install connectdb```
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
 10)
 11) For only Mysql
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 pip install -U connectdb[mysql db]```
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 12)
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 13)
 14) For only MongoDB
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 `pip install -U connectdb[mongodb]```
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 15)
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 17) For only Cassandra
 `pip install -U connectdb[cassandra db]```
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 18)
79861774 (Arjun Panwar 2021-09-03 01:05:13 +0530
 19)
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
 20) ## Mysql
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
 21)
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
 22) #### prerequisite
 23) mysql-connector-pythonmust be installed
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
 24) To install it, run below command
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
 25)
 pip install mysql-connector-python`
fe642dcb (Arjun Panwar 2021-09-02 14:56:30 +0530
 26)
```

# For more visit: https://www.techielass.com/inspect-a-git-respository/

git status git log