

Experiment - 3

Aim: Program to generate logs

Git Status:

The git status command **displays the state of the working directory and the staging area**. It lets you see which changes have been staged, which haven't, and which files aren't being tracked by Git. Status output does not show you any information regarding the committed project history.

Git Init:

The git init is **one way to start a new project with Git**. To start a repository, use either git init or git clone - not both. To initialize a repository, Git creates a hidden directory called .git . That directory stores all of the objects and refs that Git uses and creates as a part of your project's history.

Git Add:

git add [filename] **selects that file, and moves it to the staging area, marking it for inclusion in the next commit**. You can select all files, a directory, specific files, or even specific parts of a file for staging and commit.

Git commit:

The git commit command **captures a snapshot of the project's currently staged changes**. Committed snapshots can be thought of as “safe” versions of a project—Git will never change them unless you explicitly ask it to.

Git Log:

Git log is **a utility tool to review and read a history of everything that happens to a repository**. Multiple options can be used with a git log to make history more specific. Generally, the git log is a record of commits.

```

MINGW64/d/Cpp Questions
w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions
$ git status
fatal: not a git repository (or any of the parent directories): .git

w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions
$ git init
Initialized empty Git repository in D:/Cpp Questions/.git/

w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions (master)
$ git status
On branch master

No commits yet

Untracked Files:
  (use "git add <file>..." to include in what will be committed)
        Array.txt

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

w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions (master)
$ git add .

w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions (master)
$ git status
On branch master

No commits yet

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

w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions (master)
$ git commit -m "Added Array File"
[master (root-commit) 3dee0b6] Added Array File
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Array.txt

w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions (master)
$ git log
commit 3dee0b6832a3c082c413752702c346a455e591dc (HEAD -> master)
Author: AnshWadhwa11 <ansh0217.be21@chitkara.edu.in>
Date:   Sun Apr 10 18:50:14 2022 +0530

    Added Array File

w@DESKTOP-C25A056 MINGW64 /d/Cpp Questions (master)
$

```