

Cognizance Task - 1

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Basic Operations:

The following is a summary of basic git operations:

git add: Puts current working files into the stage.

kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git add .

git checkout: Replaces the current working files with files from a branch.

kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git checkout
Your branch is up to date with 'origin/main'.

git checkout -b: Creates a new local branch from the current branch's tip.

kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git checkout -b newbranch Switched to a new branch 'newbranch'

git clone: Clone an existing repository into a new directory.

```
kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git clone https://github.com/Kumar-laxmi/Cognizance.git Cloning into 'Cognizance'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
```

git commit: Commits staged changes to a local branch.

git commit -a: Commits all modified files to a local branch(shorthand for "git add" followed by "git commit" for each modified file).

```
kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git commit -a
On branch newbranch
Untracked files:
   (use "git add <file>..." to include in what will be committed)
        Cognizance/
nothing added to commit but untracked files present (use "git add" to track)
```

git fetch: Downloads changes from a remote repository into the local clone.

kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git fetch

git merge: Merges files from a given branch into the current branch.

kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git merge
fatal: No remote for the current branch.

git pull: Fetches remote changes on the current branch into the local clone, and merges them into the current working files.

```
kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git pull
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with:
    git branch --set-upstream-to=origin/<branch> newbranch
```

git push: Uploads changes from all local branches to the respective remote repositories.

```
kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git push origin newbranch
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'newbranch' on GitHub by visiting:
remote: https://github.com/Kumar-laxmi/Cognizance/pull/new/newbranch
remote:
To https://github.com/Kumar-laxmi/Cognizance.git
  * [new branch] newbranch -> newbranch
```

git reset: Makes the current branch point to some specific revision or branch

```
kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git reset
```

git rebase: Integrates changes from one branch into another. It is an alternative to the better known "merge" command.

```
kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git rebase
There is no tracking information for the current branch.
Please specify which branch you want to rebase against.
See git-rebase(1) for details.
```

git fork: Fork will create a copy of the repository in your GitHub account so that you can make changes to the project.

kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git fork https://github.com/Kumar-laxmi/Cognizance.git

Git config -list -show-origin:

```
kumarlaxmikant@Kumars-MacBook-Pro Cognizance % git config --list --show-origin
file:/usr/local/etc/gitconfig
                                  credential.helper=osxkeychain
file:/Users/kumarlaxmikant/.gitconfig
                                            filter.lfs.process=git-lfs filter-process
                                            filter.lfs.required=true
file:/Users/kumarlaxmikant/.gitconfig
file:/Users/kumarlaxmikant/.gitconfig
                                           filter.lfs.clean=git-lfs clean -- %f
file:/Users/kumarlaxmikant/.gitconfig
file:/Users/kumarlaxmikant/.gitconfig
file:/Users/kumarlaxmikant/.gitconfig
                                           filter.lfs.smudge=git-lfs smudge -- %f
                                           user.name=Kumar-laxmi
                                           user.email=laxmikantk2002@gmail.com
file:.git/config
                          core.repositoryformatversion=0
file:.git/config
                          core.filemode=true
file:.git/config
                          core.bare=false
file:.git/config
                          core.logallrefupdates=true
file:.git/config
                          core.ignorecase=true
file:.git/config
                          core.precomposeunicode=true
file:.git/config
                          remote.origin.url=https://github.com/Kumar-laxmi/Cognizance.git
file:.git/config
                          remote.origin.fetch=+refs/heads/*:refs/remotes/origin/*
file:.git/config
                          branch.main.remote=origin
file:.git/config
                          branch.main.merge=refs/heads/main
```