

# GITHUB AND GIT OPREATIONS

## Cognizance task1

By,

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### 1. To create a github local repo:

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop
$ pwd
/c/Users/kvars/Desktop

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop
$ mkdir cognizance
mkdir: cannot create directory 'cognizance': File exists

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop
$ ls
iclick.cmd          'Repay certificate _ LIC HFL _ Customer Portal.pdf'  'IMPACT.lnk*'      'shrivarshini_21077 capstone.fprg'
Analyzer.lnk*       'SHRIVARSHINI_21077 PSAT LAB ASSIGNMENT 2.fprg'      'lic policy payment receipt 21-22.pdf'  'thejoy.html'
FF PLAN FOR MR. KANNAN, KOLATHUR.pdf' 'STATEMENT.pdf'                                     'output of capstone project(shrivarshini_21077).txt'  'varsha - Chrome.lnk*'
'LTspice XVII.lnk*'  'Youtube.lnk*'                                       'pass.docx'        '~$077 shrivarshini lab6 report.docx'
'Legion Game Shop.lnk*' 'amirta fee receipt.pdf'                          'royal sundaram premium receipt 21-22.pdf'  '~$RIVARSHINI (SCHOLARSHIP) ESSAY.docx'
'Microsoft Edge.lnk*' 'changed plan first floor.pdf'                     'scriptuh.docx'    '~$SE LAB REPORT-21077 SHRIVARSHINI.docx'
'Microsoft Teams.lnk*' 'cognizance/'                                       'shivani 2nd term school fees 21-22.pdf'  '~$resume.docx'
'Project Navigator.lnk*' 'desktop.ini'                                       'shivani schoolfees 21-22 1st term.pdf'  '~$shrivarshini_essay.docx'

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop
$ cd cognizance

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance
$ git init
Initialized empty Git repository in C:/Users/kvars/Desktop/cognizance/.git/

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$
```

### 2.git add-Puts current working files into the stage

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ touch file1.txt

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git add file1.txt

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   file1.txt

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ |
```

### Git status

```
MINGW64/c/Users/kvars/Desktop/cognizance

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   file1.txt

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ |
```

## Git commit: Commit changes staged files to local branch

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git commit -m "First commit"
Author identity unknown

*** Please tell me who you are.

run

    git config --global user.email "you@example.com"
    git config --global user.name "Your Name"

to set your account's default identity,
run --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'kvars@LAPTOP-IE63BE91.(none)')

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git config --global user.email shri210404.kvarshashine@gmail.com
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git config --global user.name "shri210404"
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git commit -m "First commit"
(master root-commit) ef8cc70 first commit
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file1.txt
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$
```

## git commit -a -Commits all modified files to a local branch

```
MINGW64/c/Users/kvars/Desktop/cognizance

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git commit -a
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    cognizance-task-1/

nothing added to commit but untracked files present (use "git add" to track)
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$
```

## git checkout-

Replaces the current working files with files from a branch.

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (core)
$ git checkout master
Switched to branch 'master'

kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$
```

## git checkout -b-

Creates a new local branch from the current branch's tip.

```
MINGW64/c/Users/kvars/Desktop/cognizance
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git checkout -b core
Switched to a new branch 'core'
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (core)
$ |
```

## git clone-

Clone an existing repository into a new directory.

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git clone https://github.com/shri210404/cognizance-task-1.git
Cloning into 'cognizance-task-1'...
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.
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ |
```

## git merge-

Merges files from a given branch into the current branch.

```
MINGW64/c/Users/kvars/Desktop/cognizance
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git merge core
Already up to date.
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ |
```

## git pull

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

```
<vars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git pull
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 603 bytes | 30.00 KiB/s, done.
-rom https://github.com/shri210404/cognizance-task-1
* [new branch]      main      -> origin/main
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=<remote>/<branch> master

<vars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ |
```

## git push

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

```
<vars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git push origin master
fatal: 'origin' 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.

<vars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git remote add "shri210404" https://github.com/shri210404/cognizance-task-1.git

<vars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git remote add origin https://github.com/shri210404/cognizance-task-1.git

<vars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 197 bytes | 98.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/shri210404/cognizance-task-1/pull/new/master
remote:
To https://github.com/shri210404/cognizance-task-1.git
 * [new branch]      master -> master

<vars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ |
```

## git reset

Makes the current branch point to some specific revision or branch

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git reset HEAD file1.txt
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    cognizance-task-1/

nothing added to commit but untracked files present (use "git add" to track)
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ |
```

## git rebase

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

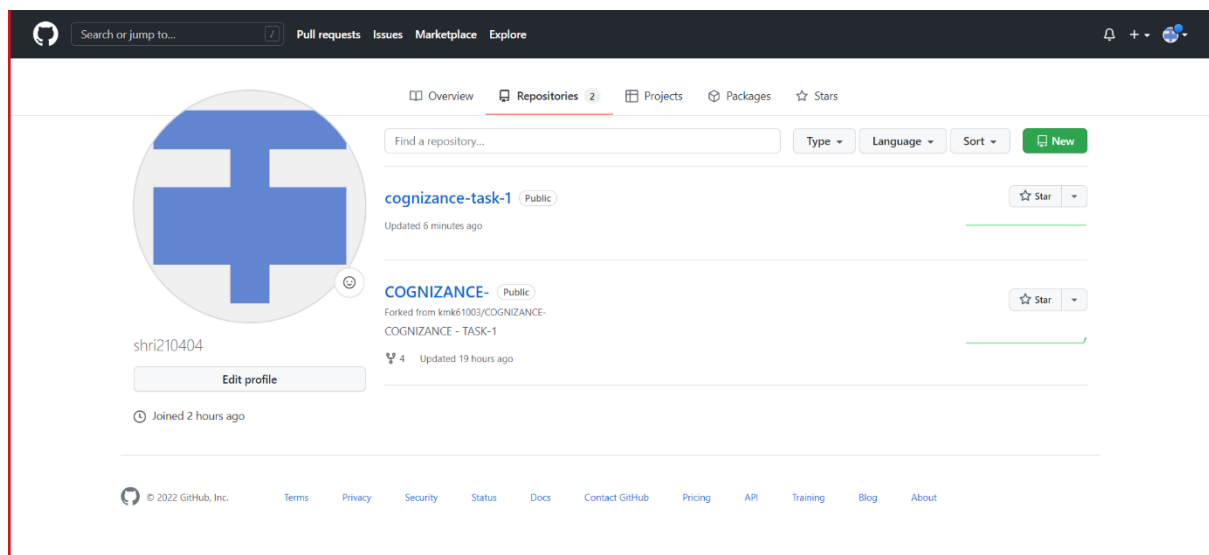
```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git rebase core
current branch master is up to date.
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$
```

## Git fetch

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git fetch
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
```

## git fork

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



## git config --list --show-origin

```
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
$ git config --list --show-origin
file:C:/Users/kvars/Downloads/Git/etc/gitconfig diff.astextplain.textconv=astextplain
file:C:/Users/kvars/Downloads/Git/etc/gitconfig filter.lfs.clean-git-lfs clean -- %f
file:C:/Users/kvars/Downloads/Git/etc/gitconfig filter.lfs.smudge-git-lfs smudge -- %f
file:C:/Users/kvars/Downloads/Git/etc/gitconfig filter.lfs.process-git-lfs filter-process
file:C:/Users/kvars/Downloads/Git/etc/gitconfig filter.lfs.required=true
file:C:/Users/kvars/Downloads/Git/etc/gitconfig http.sslbackend=openssl
file:C:/Users/kvars/Downloads/Git/etc/gitconfig http.sslcainfo=C:/Users/kvars/Downloads/Git/mingw64/ssl/certs/ca-bundle.crt
file:C:/Users/kvars/Downloads/Git/etc/gitconfig core.autocrlf=true
file:C:/Users/kvars/Downloads/Git/etc/gitconfig core.fscache=true
file:C:/Users/kvars/Downloads/Git/etc/gitconfig core.editor=wordpad
file:C:/Users/kvars/Downloads/Git/etc/gitconfig pull.rebase=false
file:C:/Users/kvars/Downloads/Git/etc/gitconfig credential.helper=manager-core
file:C:/Users/kvars/Downloads/Git/etc/gitconfig credential.https://dev.azure.com.usehttppath=true
file:C:/Users/kvars/Downloads/Git/etc/gitconfig init.defaultbranch=master
file:C:/Users/kvars/.gitconfig user.email=shri210404
file:C:/Users/kvars/.gitconfig core.repositoryformatversion=0
file:C:/Users/kvars/.gitconfig core.filemode=false
file:C:/Users/kvars/.gitconfig core.bare=false
file:C:/Users/kvars/.gitconfig core.logallrefupdates=true
file:C:/Users/kvars/.gitconfig core.symlinks=false
file:C:/Users/kvars/.gitconfig core.ignorecase=true
file:C:/Users/kvars/.gitconfig remote.shri210404.url=https://github.com/shri210404/cognizance-task-1.git
file:C:/Users/kvars/.gitconfig remote.shri210404.fetch=refs/heads/*:refs/remotes/shri210404/*
file:C:/Users/kvars/.gitconfig remote.origin.url=https://github.com/shri210404/cognizance-task-1.git
file:C:/Users/kvars/.gitconfig remote.origin.fetch=refs/heads/*:refs/remotes/origin/*
kvars@LAPTOP-IE63BE91 MINGW64 ~/Desktop/cognizance (master)
```