

**RAAGAVEDA E**

**CH.EN.U4CSE20119, 2<sup>ND</sup> YR CSE B**

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### **TASK 1 [GIT & GITHUB]**

#### **#Creating a GitHub account**

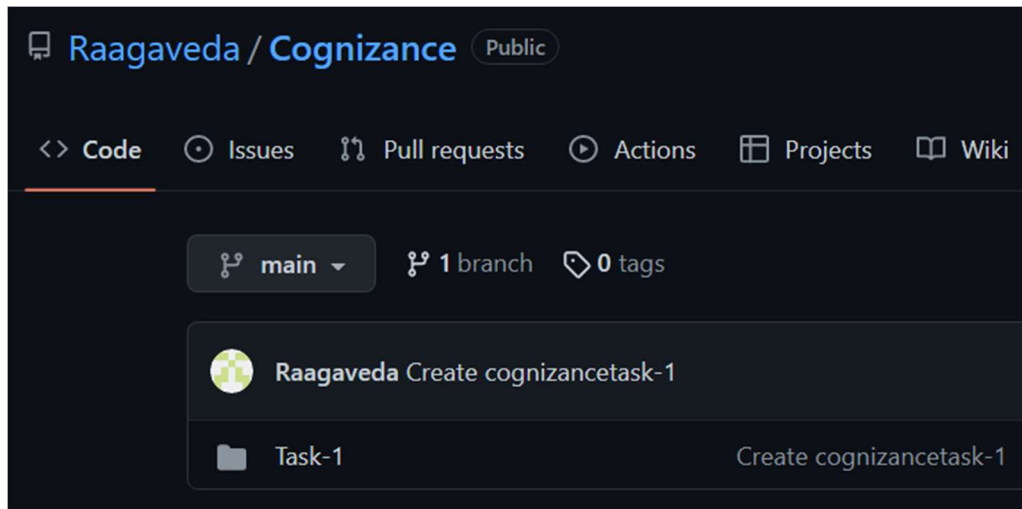
My GitHub link: <https://github.com/Raagaveda>

#### **#Install Git in your desktop**

GitHub is already installed on my computer.

A screenshot of a terminal window with a black background. The title bar at the top reads "MINGW64:/c/Users/raaga". The terminal content shows the prompt "raaga@RaagaVeda MINGW64 ~ (master)" in green text, followed by a dollar sign "\$" and a vertical bar "|" on the next line, indicating a ready state for input.

1. Create a repository with name "Cognizance" on GitHub using Git Bash.
2. Create a folder with name "Task-1" in the repository and perform the Git operations using Git Bash.



3. Upload the screenshot of the git bash using This command in your computer.

**git config --list --show-origin**

```
raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git config --list --show-origin
file:C:/Program Files/Git/etc/gitconfig diff.astextplain.textconv=astextplain
file:C:/Program Files/Git/etc/gitconfig filter.lfs.clean=git-lfs clean -- %f
file:C:/Program Files/Git/etc/gitconfig filter.lfs.smudge=git-lfs smudge -- %f
file:C:/Program Files/Git/etc/gitconfig filter.lfs.process=git-lfs filter-process
file:C:/Program Files/Git/etc/gitconfig filter.lfs.required=true
file:C:/Program Files/Git/etc/gitconfig http.sslbackend=openssl
file:C:/Program Files/Git/etc/gitconfig http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
file:C:/Program Files/Git/etc/gitconfig core.autocrlf=true
file:C:/Program Files/Git/etc/gitconfig core.fscache=true
file:C:/Program Files/Git/etc/gitconfig core.symlinks=false
file:C:/Program Files/Git/etc/gitconfig pull.rebase=false
file:C:/Program Files/Git/etc/gitconfig credential.helper=manager-core
file:C:/Program Files/Git/etc/gitconfig credential.https://dev.azure.com.usehttppath=true
file:C:/Program Files/Git/etc/gitconfig init.defaultbranch=master
file:C:/Users/raaga/.gitconfig user.email=raagaveda9@gmail.com
file:C:/Users/raaga/.gitconfig user.name=RAAGAVEDA
file:./git/config core.repositoryformatversion=0
file:./git/config core.filemode=false
file:./git/config core.bare=false
file:./git/config core.logallrefupdates=true
file:./git/config core.symlinks=false
file:./git/config core.ignorecase=true

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$
```

## #Git Operations

### git add

Puts current working files into the stage.

```
raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git add .

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   Task -1.docx
```

### git checkout

Replaces the current working files with files from a branch.

```
raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git branch raagi

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git checkout raagi
Switched to branch 'raagi'

raaga@RaagaVeda MINGW64 /d/Cognizance (raagi)
$ git checkout master
Switched to branch 'master'
```

### git checkout -b

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

```
raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git checkout -b r_branch
Switched to a new branch 'r_branch'
```

### git clone

Clone an existing repository into a new directory.

```
raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ git clone https://github.com/Raagaveda/cogcopy.git
Cloning into 'cogcopy'...
warning: You appear to have cloned an empty repository.
```

## git commit

Commits staged changes to a local branch.

```
raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ touch f1.txt

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ git add f1.txt

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ git commit -m "added f1 file "
[r_branch 79facaa] added f1 file
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 f1.txt

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ !
```

## git commit -a

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

```
raaga@RaagaVeda MINGW64 /d/Cognizance/task1 (rv_branch)
$ git commit -a
On branch rv_branch
nothing to commit, working tree clean

raaga@RaagaVeda MINGW64 /d/Cognizance/task1 (rv_branch)
$ !
```

## git fetch

Downloads changes from a remote repository into the local clone.

```

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ git fetch https://github.com/Raagaveda/Cognizance.git
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), 580 bytes | 1024 bytes/s, done.
From https://github.com/Raagaveda/Cognizance
* branch          HEAD      -> FETCH_HEAD

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)

```

## git merge

Merges files from a given branch into the current branch.

Merge with commit id:

```

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ git log
commit e26661204a5c418866581d8a74a16630072382e8 (HEAD -> r_branch, raagi, master)
Author: RAAGA VEDA <raagaveda9@gmail.com>
Date: Thu Jun 9 15:09:34 2022 +0530

    addtask

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ git merge e26661204a5c418866581d8a74a16630072382e8
Already up to date.

```

Merging the branches:

```

raaga@RaagaVeda MINGW64 /d/Cognizance (r_branch)
$ git checkout master
Switched to branch 'master'

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git merge r_branch
Updating e266612..79faca
Fast-forward
 f1.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 f1.txt

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$

```

## git pull

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

```

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git pull https://github.com/Raagaveda/Cognizance.git
remote: Enumerating objects: 8, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 8 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (8/8), 1.75 KiB | 10.00 KiB/s, done.
From https://github.com/Raagaveda/Cognizance
* branch          HEAD      -> FETCH_HEAD
fatal: refusing to merge unrelated histories

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$

```

## git push

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

```

raaga@RaagaVeda MINGW64 /d/Cognizance/task1 (master)
$ git push origin master

Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 224 bytes | 224.00 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/Raagaveda/Cognizance/pull/new/master
remote:
To https://github.com/Raagaveda/Cognizance.git
* [new branch]      master -> master

```

## git reset

Makes the current branch point to some specific revision or branch

```

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git add f2.txt

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git commit -m "adding f2 file"
[master 64718c0] adding f2 file
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 f2.txt

raaga@RaagaVeda MINGW64 /d/Cognizance (master)
$ git reset

raaga@RaagaVeda MINGW64 /d/Cognizance (master)

```

## git rebase

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

```
raaga@RaagaVeda MINGW64 /d/Cognizance/task1 (master)
$ git checkout rv_branch
Switched to branch 'rv_branch'

raaga@RaagaVeda MINGW64 /d/Cognizance/task1 (rv_branch)
$ git rebase master
Current branch rv_branch is up to date.

raaga@RaagaVeda MINGW64 /d/Cognizance/task1 (rv_branch)
$
```

## git fork

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

- Find the GitHub repository which you want to fork.
- Click the Fork button on the upper right side of the repository's page.

