

Task 1-

Creating a repository with name “Cognizance” on GitHub using Git Bash.

```
MINGW64/C:/Users/pc/Cognizance

C:\Users\pc\Cognizance (master)
$ touch Task-1

C:\Users\pc\Cognizance (master)
$ git init
Initialized existing Git repository in C:/Users/pc/Cognizance/.git/

C:\Users\pc\Cognizance (master)
$ git add Task-1

C:\Users\pc\Cognizance (master)
$ git commit -m "Creating folder"
[master (root-commit) ab56d10] creating folder
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Task-1

C:\Users\pc\Cognizance (master)
$ git remote add origin https://github.com/SaanyaGaur05/Cognizance.git
error: remote origin already exists.

C:\Users\pc\Cognizance (master)
$ git push -u origin master
The authenticity of host 'github.com (13.234.210.38)' can't be established.
ED25519 key fingerprint is SHA256:c013b0v6tU3Hdp21sf/ZL0AD2p9Svndkr40CQp.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'github.com' (ED25519) to the list of known hosts.
github.com: Permission denied (publickey).
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

C:\Users\pc\Cognizance (master)
$ git config --global user.name "Saanya Gaur"
error: invalid key: user.name

C:\Users\pc\Cognizance (master)
$ git config --global user.name "Saanya Gaur"

C:\Users\pc\Cognizance (master)
$ git config --global user.email "saanyagaur@gmail.com"

C:\Users\pc\Cognizance (master)
$ ssh-keygen -t ed25519 -C "saanyagaur@gmail.com"
Generating public/private ed25519 key pair
Enter file in which to save the key (C:/Users/pc/.ssh/id_ed25519):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:/Users/pc/.ssh/id_ed25519
Your public key has been saved in C:/Users/pc/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:qoztZuagw-adj3J8uW112Q2z4k3j3Xdx5uafda saanyagaur@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
|.0B* . .
+-----+

C:\Users\pc\Cognizance
$ curl -s https://api.github.com/repos/SaanyaGaur05/Cognizance
{"url": "https://api.github.com/repos/SaanyaGaur05/Cognizance",
"fork_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/forks",
"keys_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/keys/{key_id}",
"collaborators_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/collaborators/{collaborator}",
"teams_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/teams",
"hooks_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/hooks",
"issue_events_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/issues/events/{number}",
"events_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/events",
"assignees_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/assignees/{user}",
"branches_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/branches/{branch}",
"tags_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/tags",
"blobs_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/git/blobs/{sha}",
"git_tags_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/git/tags/{sha}",
"git_refs_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/git/refs/{sha}",
"trees_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/git/trees/{sha}",
"statuses_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/statuses/{sha}",
"languages_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/languages",
"stargazers_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/stargazers",
"contributors_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/contributors",
"subscribers_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/subscribers",
"subscription_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/subscription",
"commits_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/commits/{sha}",
"git_commits_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/git/commits/{sha}",
"comments_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/comments/{number}",
"issue_comment_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/issues/comments/{number}",
"contents_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/contents/{path}",
"compare_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/compare/{base}...{head}",
"merges_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/merges",
"archive_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/archive_format/{ref}",
"downloads_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/downloads",
"page_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/issues/{number}",
"milestones_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/milestones/{number}",
"notifications_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/notifications/{since,all,participating}",
"labels_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/labels/{name}",
"deployments_url": "https://api.github.com/repos/SaanyaGaur05/Cognizance/deployments/{id}",
"created_at": "2022-02-15T14:27:12Z",
"updated_at": "2022-02-15T14:27:12Z",
"pushed_at": "2022-02-15T14:27:12Z",
"git_url": "git://github.com/SaanyaGaur05/Cognizance.git",
"ssh_url": "ssh://github.com/SaanyaGaur05/Cognizance.git",
"clone_url": "https://github.com/SaanyaGaur05/Cognizance.git",
"svn_url": "https://github.com/SaanyaGaur05/Cognizance",
"homepage": null,
"size": 0,
"stargazers_count": 0,
"watchers_count": 0,
"language": null,
"has_issues": true,
"has_projects": true,
"has_downloads": true,
"has_wiki": true,
"has_pages": false}
```


Task 2-

Creating a folder with name “Task-1” in the repository and perform the Git operations using Git Bash.

```
MINGW64/C:/Users/pc/Cognizance
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ touch index.html
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ touch pie.c
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ touch snake.py
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ git status
on branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        index.html
        pie.c
        readme.md
        snake.py

nothing added to commit but untracked files present (use "git add" to track)
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ git add -A
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ git status
on branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   index.html
        new file:   pie.c
        new file:   readme.md
        new file:   snake.py

pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ code
bash: code: command not found
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ notepad
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ notepad
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ notepad
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ git status
on branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Task-1
        new file:   index.html
        new file:   pie.c
        new file:   readme.md
        new file:   snake.py

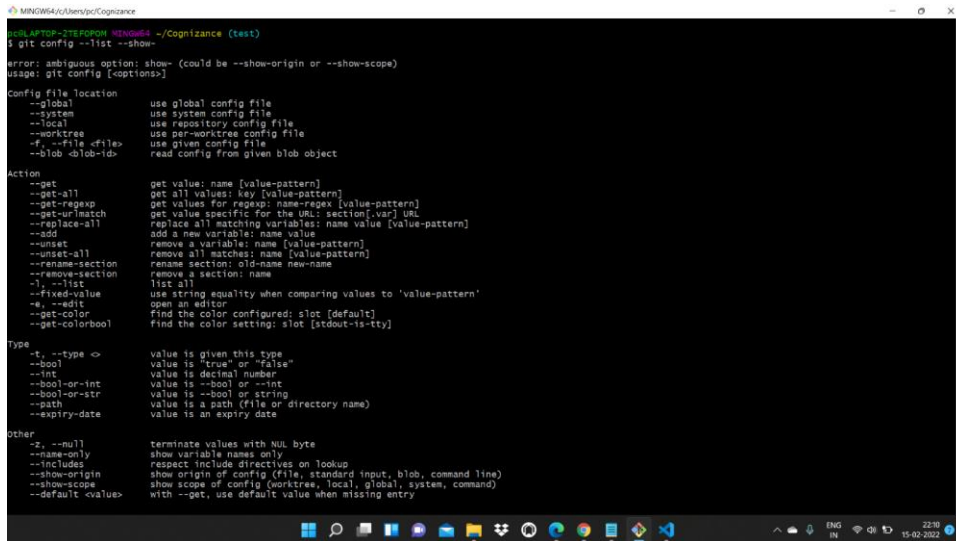
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Task-1

pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ ls
Task-1 index.html pie.c readme.md snake.py
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ cat index.html
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ notepad
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ ls
Task-1 index.html pie.c readme.md snake.py
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ touch
touch: missing file operand
Try 'touch --help' for more information.
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
$ touch abc.txt
pc@LAPTOP-27E10P9W MINGW64 ~/Cognizance (master)
```

[illegible]

Task –3

The screenshot of the git bash using
git config --list --show-
command in your computer.



```
MINGW64 ~/Users/pcc/Cognizance
pcc\LAPTOP-2TEFOPOM NEWAME4 ~/Cognizance (test)
$ git config --list --show-
error: ambiguous option: show- (could be --show-origin or --show-scope)
usage: git config [<options>]

Config file location
--global          use global config file
--system          use system config file
--local          use repository config file
--worktree       use per-worktree config file
-f, --file <file> use given config file
--blob <blob-id>  read config from given blob object

Action
--get            get value: name [value-pattern]
--get-all       get all values: key [value-pattern]
--get-regexp     get values for regexp: name-regex [value-pattern]
--get-urlmatch  get value specific for the URL: section[:var] URL
--replace-all   replace all matching variables: name value [value-pattern]
--add           add a new variable: name value
--unset         remove a variable: name [value-pattern]
--unset-all     remove all matches: name [value-pattern]
--rename-section rename section: old-name new-name
--remove-section remove a section: name
-l, --list       list all
--fixed-value    use string equality when comparing values to 'value-pattern'
-e, --edit       open an editor
--get-color      find the color configured: slot [default]
--get-colorbool  find the color setting: slot [stdout-is-ty]

Type
-t, --type <type> value is given this type
--bool           value is "true" or "false"
--int            value is decimal number
--bool-or-int    value is --bool or --int
--bool-or-str    value is --bool or string
--path           value is a path (file or directory name)
--expiry-date    value is an expiry date

Other
-z, --null       terminate values with NUL byte
--name-only      show variable names only
--includes       respect include directives on lookup
--show-origin    show origin of config (file, standard input, blob, command line)
--show-scope     show scope of config (worktree, local, global, system, command)
--default <value> with --get, use default value when missing entry
```

TASK -4

Here I have used add command, commit command and push command

Add command: to shift the file to be staged

Commit command: commit stage changes to local command

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

Merge command: Merges files from a given branch into the current branch.

```
MINGW64/C:/Users/pc/Cognizance
nothing added to commit but untracked files present (use "git add" to track)
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (context)
$ git add -A
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (context)
$ git commit
Aborting commit due to empty commit message.
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (context)
$ git commit -a -m "hello"
[context 6503734] hello
2 files changed, 2 insertions(+)
create mode 100644 m21.txt
create mode 100644 m22.txt
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (context)
$ git status
On branch context
Your branch is ahead of 'origin/context' by 1 commit.
(use "git push" to publish your local commits)

nothing to commit, working tree clean
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (context)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (master)
$ ls
Task-1 abc.txt index.html pie.c readMe.md saaa.txt sam.txt saum.txt snake.py yaaa.txt
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (master)
$ git merge context
Updating 246b7e...6503734
Fast-forward
 contexts.txt | 2 ++
 m21.txt      | 1 +
 m22.txt      | 1 +
 3 files changed, 4 insertions(+)
 create mode 100644 contexts.txt
 create mode 100644 m21.txt
 create mode 100644 m22.txt
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (master)
$ ls
Task-1 abc.txt contexts.txt index.html m21.txt m22.txt pie.c readMe.md saaa.txt sam.txt saum.txt snake.py yaaa.txt
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (master)
$ |
```

Here I used

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

```
MINGW64/C:/Users/pc/Cognizance
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (master)
$ git branch test
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (master)
$ git checkout test
Switched to branch 'test'
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ touch z1
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ touch k1.txt
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ code
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ git status
On branch test
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    z1.txt
    k1.txt
nothing added to commit but untracked files present (use "git add" to track)
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ git add -A
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ git commit -a -m "hey hello"
[test 811bc22] hey hello
2 files changed, 1 insertion(+)
create mode 100644 k1.txt
create mode 100644 z1
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ git status
On branch test
nothing to commit, working tree clean
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (test)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 2 commits.
(use "git push" to publish your local commits)
pc@BLAPTOP-2T1EFPQW MINGW64 ~/Cognizance (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 2 commits.
```

```
MINGW64/C:/Users/pc/Cognizance
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 2 commits.
(use "git push" to publish your local commits)

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 2 commits.
(use "git push" to publish your local commits)

nothing to commit, working tree clean

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (master)
$ touch y1.txt

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (master)
$ git add -A

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (master)
$ git commit -m "hey hey"
[master 70cc22] hey hey
1 file changed, 0 insertions(+), 0 deletions(-)
Create mode 100644 y1.txt

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (master)
$ git test
git: 'test' is not a git command. See 'git --help'.
The most similar command is
reset

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (master)
$ git checkout test
Switched to branch 'test'

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ ls
Task-1 contexts.txt k1.txt m2.txt readme.md sam.txt snake.py zl
abc.txt index.html m21.txt pie.c saaa.txt saum.txt yaaa.txt

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ git reset master
Successfully released and updated refs/heads/test.

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ ls
Task-1 contexts.txt k1.txt m2.txt readme.md sam.txt snake.py yaaa.txt
abc.txt index.html m21.txt pie.c saaa.txt saum.txt y1.txt zl

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ |
```

Here I used

Reset command- Makes the current branch point to some specific revision or branch

```
MINGW64/C:/Users/pc/Cognizance
pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ touch exam.txt

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ touch preexam.txt

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ git add -A

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ git status
On branch test
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   exam.txt
        new file:   preexam.txt

pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ git reset
$ git status
On branch test
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        exam.txt
        preexam.txt

nothing added to commit but untracked files present (use "git add" to track)
pc@LAPTOP-2TE5F0PW MINGW64 ~/Cognizance (test)
$ |
```

Here I have used

Clone command: Clone an existing repository into a new directory.


```
pc@LAPTOP-ZTEFOPOM MINGW64 ~/cognizance (test)
$ ls
Task-1 contexts.txt index.html mz1.txt pie.c readMe.md sam.txt snake.py yaaa.txt
abc.txt exam.txt k1.txt mz2.txt preexam.txt saaa.txt saum.txt y1.txt z1

pc@LAPTOP-ZTEFOPOM MINGW64 ~/cognizance (test)
$ git clone https://github.com/illuminate/html.git
Cloning into 'html'...
remote: Enumerating objects: 609, done.
remote: Total 609 (delta 0), reused 0 (delta 0), pack-reused 609
Receiving objects: 100% (609/609), 98.19 KiB | 238.00 KiB/s, done.
Resolving deltas: 100% (260/260), done.

pc@LAPTOP-ZTEFOPOM MINGW64 ~/cognizance (test)
$ ls
Task-1 contexts.txt html/ k1.txt mz2.txt preexam.txt saaa.txt saum.txt y1.txt z1
abc.txt exam.txt index.html mz1.txt pie.c readMe.md sam.txt snake.py yaaa.txt

pc@LAPTOP-ZTEFOPOM MINGW64 ~/cognizance (test)
$
```

Here I used

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

