

Git

1)init

Create a new repository in the file

MINGW64:/g/communication skills/assignment

```
C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment
$ git init
Initialized empty Git repository in //CS-STUDENT-01/HOME$/202300/KCCGD_B_Y1/C003
03423/communication skills/assignment/.git/

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$
```

A new folder is created with .git

Name	Date modified	Type	Size
.git	20/10/2023 11:36	File folder	
assignment	20/10/2023 11:36	Microsoft Word D...	0 KB

Type: Microsoft Word Document
Size: 0 bytes
Date modified: 20/10/2023 11:36

2)status

It shows which files have been committed or uploaded to repository.

Red means they are not uploaded. They need to be uploaded

```
C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        assignment.docx
        ~$signment.docx

nothing added to commit but untracked files present (use "git add" to track)
C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$
```

Green means they have been uploaded.

```
MINGW64:/g/communication skills/assignment

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ git add report.txt

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ git status
On branch master

No commits yet

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

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        assignment.docx
        ~$signment.docx

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ |
```

3)add

Add command is used to add or upload the file to the repository which is currently stored on the local system.

```
MINGW64:/g/communication skills/assignment

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ git add report.txt

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ git status
On branch master

No commits yet

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

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        assignment.docx
        ~$signment.docx

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ |
```

4) commit

Commit helps to add a time stamp which tells what are the changes made to the file with securing the previous one.

```
C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ git commit -m "first commit"
[master d6c4371] first commit
Committer: (Student C00303423) Dhruv Dagar <C00303423@setu.ie>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 24 insertions(+)

C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ |
```

5)push

Push command is generally made after the commit because this is the command which is responsible for uploading the file to the git.which is generally followed by the branch name.

```
C00303423@CD-A307-23 MINGW64 /g/communication skills/assignment (master)
$ git push -u origin master
info: please complete authentication in your browser...
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 704 bytes | 234.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/PeterLowe/git-one-DagarDhruv.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.
```

6)remote

It creates a new repository remotely.the command for this is git add remote
<name> <url>

```
C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ git remote add test https://github.com/PeterLowe/git-one-DagarDhruv.git

C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ git remote -v
origin  https://github.com/PeterLowe/git-one-DagarDhruv.git (fetch)
origin  https://github.com/PeterLowe/git-one-DagarDhruv.git (push)
test    https://github.com/PeterLowe/git-one-DagarDhruv.git (fetch)
test    https://github.com/PeterLowe/git-one-DagarDhruv.git (push)
```

7)log

It gives us the log of the commit history. The command is git log.

```

C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ git push -u test master
commit cd251b7bbaae9f6511647d82cfa7c2fa9f26d625 (HEAD -> master)
Author: (Student C00303423) Dhruv Dagar <c00303423@setu.ie>
Date: Mon Oct 23 12:29:50 2023 +0100

    git remote

commit cd251b7bbaae9f6511647d82cfa7c2fa9f26d625 (HEAD -> master)
Author: (Student C00303423) Dhruv Dagar <c00303423@setu.ie>
Date: Mon Oct 23 12:29:50 2023 +0100

    git remote

commit ae8dc35f5b95d61da962a9a03ff72d44849c6caa (origin/master)
Author: (Student C00303423) Dhruv Dagar <C00303423@setu.ie>
Date: Fri Oct 20 12:42:01 2023 +0100

    third commit

commit c6c8ecd024e382ceb596beb8a1ee7118cbb36186
Author: (Student C00303423) Dhruv Dagar <C00303423@setu.ie>
Date: Fri Oct 20 12:40:19 2023 +0100

    second commit

commit d6c43713378902e765607eb1514cdf5145e8b061
Author: (Student C00303423) Dhruv Dagar <C00303423@setu.ie>
Date: Fri Oct 20 12:20:34 2023 +0100

    first commit

commit 9c0c3b2fd25fce153390c6f2f7903df628be6856
Author: (Student C00303423) Dhruv Dagar <C00303423@setu.ie>
Date: Fri Oct 20 12:04:53 2023 +0100

    Please enter the commit message for your changes. Lines starting
    ~
    ~
    ~
    ~
    ~
    ~
    ~

```

8) clone

It clones or save a copy of a repository to a local computer from the server.

```

github — zsh — 117x25
Last login: Mon Oct 23 19:31:44 on ttys000
dhruvdagar@Dhruvs-MacBook-Pro github % git clone https://github.com/PeterLowe/git-one-DagarDhruv.git
Cloning into 'git-one-DagarDhruv'...
remote: Enumerating objects: 30, done.
remote: Counting objects: 100% (30/30), done.
remote: Compressing objects: 100% (17/17), done.
remote: Total 30 (delta 11), reused 27 (delta 8), pack-reused 0
Receiving objects: 100% (30/30), 212.56 KiB | 1.88 MiB/s, done.
Resolving deltas: 100% (11/11), done.
dhruvdagar@Dhruvs-MacBook-Pro github %

```

9) rm

It removes the file from the repository. The command is `git rm <file name>`

```
C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (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)
        random.txt

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

C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ ls
assignment.docx  random.txt  report.txt  '~$signment.docx'
```

```
C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ git rm -f random.txt
rm 'random.txt'

C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ ls
assignment.docx  report.txt  '~$signment.docx'

C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ |
```

10)branch

it lists all the branches in the repository and can be add and removed by adding-

`git branch <added branch name>`

removing

`git branch -d <name of branch to be removed>`

```
C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ git branch
* master

C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ git branch test

C00303423@CD-A003-08 MINGW64 /g/communication skills/assignment (master)
$ git branch
* master
  test
```