Git and Github

What is git ?

It is a version control system . Make many version for any project

What is difference between git and github ?

Git version control system on your computer
Github website for sharing project and make it open source (any one make change on it)

To know git version ?

Git --version

To configure your git ?

Git config --global user.name 'your_name'
Git config --global user.email 'your_email'
(global to make your user name and email in global scope not need to define it each time)

To know user of git repository ?

Git config --global --list

Create repository ?

Git init

Add file to repository ?

Git add file_name.txt (or use (.) to add all file)

Save file to repository ?

Git commit -m"message to mark your version"

How to save file when you update file in one step not two ?

Git commit -am "message for commit"

To know the status of file in repository ?

Git status

Type of file status ?

1-Untracked files
2-staging area
3-commit files

Show history and all version of repository ?

Git log

How to create ssh key (so you do not need to write user name and password every time when you push something in remote repository) ?

Ssh-keygen -t rsa -b 4096 -C "your email"
Then enter enter
Then take the public key that generated from his path.
Then put this key in your email in github
After that use ssh key at every time.

How to connect your local repository with remote repository ?

Git remote add origin (then the link from github SSH or HTTP).

How to push local repository to Remote repository ?

Git push -u origin master

How to take the changes that happen in remote repository to local repository ?

Git pull (link from remote repository)

What is README.md file ?

It is a file for explaining what this repository do .

What is syntax for README.md file ?

**# it mean header one
Then any text must   end with (.)
it mean header two ----------header sex -----------like HTML**

**```javascript(or any language)
To write code in README.md file
```**


# What is branches in git and what is benefit form it ?

**When you want to test some thing in code is right or not you need to make new branch then if it is right you can make merge with the original (master).**


# How to List all branches in repository ?

**Git branch (* before branch name it mean branch is activated).**


# How to create new branch ?

**Git branch new_branch_name.**


# How to switch between many branches ?

**Git checkout branch_name_to_switch**


# How to merge two branch together ?

**Git merge branch_name**

## How to Remove branch ?

Git branch -D branch_name

## How to get the difference between last commit in repository ?

Git diff file_name.txt (+before text it mean added new - before text it mean deleted from repository).

## How to delete or restore your file in working area ?

Git checkout -- file_name.txt

## How to show id for file in log and his name only ?

Git log --pretty=one

## How to make reset for specific commit (after this commit will deleted) ?

Git reset --hard id_for_file

## How to revert to specific file (not delete after this file in log) ?

Git revert id_for_file

## What is tag and how do it is ?

Tags used in many version to make highlight for something
Git tag tag_name .


## How to push tags in remote repository ?

Git push origin tag_name or in many tags (git push origin --tags).


## How show the content of tags ?

Git show tag_name


## How to delete tag ?

Git tag -d tag_name.


## How to list tags or search about tag ?

Git tag -l "s" (tag start with 's')


## What is fork ?

Take a copy from project.


## What is pull request?

After taking a copy of project then you make update for project then
you can accept this request or not . Then make marge

# What is contributor ?

**People who make this project may be one ,two ,....**