**Github-**

Communication to Git is possible through -

* Tortoise Git
* Eclipse
* Intellij

Basic Git commands- <https://confluence.atlassian.com/bitbucketserver/basic-git-commands-776639767.html>

For a code to push to git-

1) initialize it as git repository using command ‘git init’

2) Move to staging ( first commit) using command ‘git add \*’ where add is used to moving to staging and \* means everything.

To move specific file to staging, command- ‘git add C:\Users\chaman.preet\Documents\x\test.txt’

3) Command ‘git status’ to see current status of files in staging.

Before using ‘git add \*’, you can check modifications done by ‘git status’ (recommended).

4) then move to commit state—using command ‘git commit –m “any message”’ (committed to local repository)

5) Github will push code only which is committed. Connect your local repository to a remote server using command

‘git remote add origin <https://github.com/Chaman-preet/GitDemo_pro.git>’

Now this link is your origin

6) Command ‘git push origin master’ to push master branch(bydefault) code to origin. Add username and password to connect.

To push code, **if you working behind proxy**, set proxy using command-

git config --global http.proxy http://proxyuser:proxypwd@proxy.server.com:8080

git config --global http.proxy <https://proxyuser:proxypwd@proxy.server.com:8080>

*In our case, it will be*- git config --global http.proxy cpinternet:8080

git config --global https.proxy cpinternet:8080

check proxy using command-

git config --global --get http.proxy

git config --global --get https.proxy

*Overall-*

Staging (first commit) 🡪 commit 🡪 push to Github

**Cloning-**

To clone fresh repository, command ‘git clone <https://github.com/chaman-preet/project.git>’

**Pull** is used to extract only changes to already downloaded project in your system.

First move to project folder-

Use command to pull- ‘git pull origin master’

**Branching-**

To get code in a separate place to make modifications which later can be merged into master branch.

To create new branch and switch to it, use command ‘git checkout –b develop’ (develop is branchname)

To see list of all branches, command ‘git branch’

After making changes in branch, how to push to develop branch-

* Git add \* (all actions happen in current branch which we can check by ‘git branch’)
* Git commit –m “commit to branch”
* Git push origin develop

To pull from branch

* Git pull origin develop

To switch to branch (already created branch)-

* Git checkout develop

To merge branch code to master- (after committing)

* Git checkout master (switch to master)
* Git merge develop (merge develop branch to current branch which is master)

Without commit, we cannot push, pull or merge

**Conflicts**-

When 2 people are working on a branch in parallel, or try to merge to a branch which has been changed now- then conflict happens. 5% conflicts happen which Git cannot resolve itself.

In case of conflicts, you have to discuss and change manually to make it same.

**HEAD** is current branch

Commands to move back to master code, in case you have messed your code-

git fetch origin

git reset --hard origin/master

**-a-** Includes all currently changed files in this commit.

git commit -a -m "Change titles and styling on homepage"