

1) Linux Commands

- a) `git rm <fileNameWithExtension>`
 - i) deletes file
 - ii) git stages the condition automatically
- b) `git mv hello.txt hello_renamed.txt`
 - i) renames and automatically stages
- c) `touch error.log`
 - i) creates a txt file named error.log

2) Installation, SetUp

- a) `git config --global user.name "Himanshu"`
 - i) setting up user name
- b) `git config --global user.email "agarkarhimanshu456@gmail.com"`
- c) `git config --list`
 - i) check username, mail
- d) `git config --global core.editor vim`
 - i) choose editor, eg: vim > emacs
- e) `git config user.name`
- f) `git config user.email`

3) Tracking Files

- a) `git status`
 - i) check if it is git repo
- b) `git init`
 - i) make git repo
 - ii) also creates a .git folder which is hidden
- c) `git add --a`
 - i) add all files to staging area
 - ii) after this when we commit there will be a snapshot of all files
 - iii) make untracked files to unmodified
- d) `git add first.txt`
 - i) add only 'first.txt' file to staging area
- e) `git commit -m "Initial Commit"`
 - i) commit all files
- f) `git log`
 - i) know which commit we did
 - ii) type 'Q' to escape from continuously showing logs
- g) `git log -p`
 - i) shows what change (git diff) is there along with commit logs
- h) `git log -p -3`
 - i) Shows only 3 commits along with diff
- i) `git log --stat`
 - i) git diff + no of lines added/removed
- j) `git log --pretty=oneline`
 - i) shows all commits, commits take only 1 line
- k) `git log --pretty=short`
- l) `git log --pretty=full`
 - i) shows author and committer name unlike short
- m) `git log --since=2.days`
 - i) can replace days with weeks, months
- n) `git log --pretty=format:"%h -- %an"`
 - i) for customised output
 - ii) <https://git-scm.com/docs/git-log> find for 'placeholder'
- o) `git commit --amend`
 - i) merge current stage area condition and last commit into 1 single commit

- ii) press 'i' to start editing in editor
 - iii) press esc and type ':wq' to save and quit the editor
- p) `rm -rf .git`
 - i) stop tracking folder
 - ii) deletes .git file
- q) `git diff`
 - i) compares current status of files to that of files in staging area
- r) `git diff --staged`
 - i) shows difference between currently staged (and unmodified) files and last commit
- s) `git restore --staged <file>`
 - i) to unstage files after git add
- t) `git checkout -- hello_renamed.txt`
 - i) works when file are in working directory (unstaged)
 - ii) rolls back the file to previous version of git add or commit whatever is latest
- u) `git checkout -f`
 - i) roll back to previous commit when dir is now unstaged
- v) `git commit -a -m "direct commit"`
 - i) committing files directly from tracked
 - ii) does not commit untracked files (files which have not been added even 1ce in staging area)
- w) `git rm --cached <fileNameWithExt>`
 - i) stops tracking the file whose name is under .gitignore

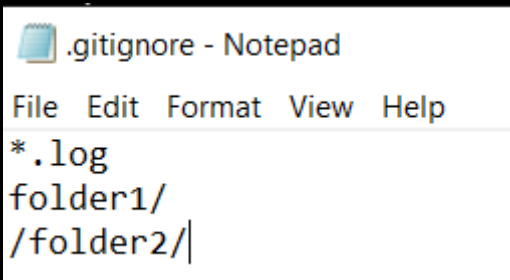
4) Cloning Remote Repo

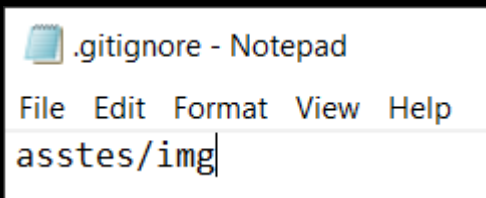
- a) `git clone https://github.com/tensorflow/tensorflow.git`
 - i) contents are pulled from url to local folder
- b) `git clone https://github.com/tensorflow/tensorflow.git <folder_name>`
 - i) customised folder_name

5) Other Points

- a) tells Git which files to ignore when committing your project to the GitHub repository
- b) add any file name in .gitignore file to ignore that file

- c)  ignores tracking all log files, and folder1 anywhere present

- d)  ignores only outer folder2

- e)  ignore img folder in assets folder
- f) git ignores blank folder by default

6) Working with Branches

- a) `git remote add origin <gitRemoteUrl>`
- b) `git remote -v`

- c) git branch
 - i) check which branches are there
- d) git checkout master
- e) git checkout -b <branchName>
- f) git push origin branch_b1
 - i) push contents from main to b1
- g) git push origin bb1:bb2
 - i) copy branch bb1 is created named as bb2 in remote
- h) git merge bb1
 - i) merges bb1 to master
- i) git branch -d bb1
 - i) delete bb1 branch