Git Commands

Set default
- git config --global user.name "John Doe"
- git config --global user.email johndoe@example.com

Clone the repo to local
- git clone URL

```
Whos-MacBook-Pro-U-think-it-is:~ Caleb$ git clone https://github.com/CSCC01/lab0
3-caleb1111
Cloning into 'lab03-caleb1111'...
Username for 'https://github.com': caleb1111
Password for 'https://caleb1111@github.com':
remote: Counting objects: 21, done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 21 (delta 1), reused 21 (delta 1), pack-reused 0
Unpacking objects: 100% (21/21), done.
Whos-MacBook-Pro-U-think-it-is:~ Caleb$ ls
Applications            Library                 eclipse-workspace
Assignment0             Movies                  file
Creative Cloud Files    Music                   group_0298
Desktop                 Pictures                lab03-caleb1111
Documents               Public                  websh
Downloads               Warm Lamp Games
Java                    chenz173
```

Commit a file to repo
1. git add file
2. git commit -m "comments here"
3. git push
4. Sometimes you need to update local copy before committing

```
Whos-MacBook-Pro-U-think-it-is:app Caleb$ nano App.java
Whos-MacBook-Pro-U-think-it-is:app Caleb$ git add App.java
Whos-MacBook-Pro-U-think-it-is:app Caleb$ git commit -m "Edited lab03. Added a p
rinting statement"
[master 16e430f] Edited lab03. Added a printing statement
 1 file changed, 1 insertion(+)
Whos-MacBook-Pro-U-think-it-is:app Caleb$ git push
Counting objects: 9, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (9/9), 617 bytes | 617.00 KiB/s, done.
Total 9 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/CSCC01/lab03-caleb1111
   85ebbb7..16e430f  master -> master
Whos-MacBook-Pro-U-think-it-is:app Caleb$ ▌
```

Check status
 - git status

Update local folder
 - git pull

Conflict
1. Git will automatically merge the changes when multiple users are **editing different lines** of a file and commit at the same time

For example:

User1 edited the 1st line of a file then he did

        -git add file
        -git commit -m "edited line 1"
        -git push

User2 edited the 2nd line of a file then

        -git add file
        -git commit -m "edited line 2"
        -git push
        Here will prompt an error message

solving conflicts   then User2 needs to
        -git pull
        and then user2 should be prompted to enter a merge message.
        press 'i' key for insert and type in the comments for changes made
        - then press 'esc' key and type in :wq

2. You will need to fix the code or the lines manually if multiple users are **editing same line** of a file and commit at the same time

For example:

User1 edited the 1st line of a file and commit to the repo

User2 edited the same line of the same file and commit to the repo
After user2 'git push' terminal will prompt an error message at this time user2 needs 'git pull' and open the file and fix it manually and then push the file into the repo