

STATS 202A: STATISTICS PROGRAMMING

HW8: GITHUB COMMANDS

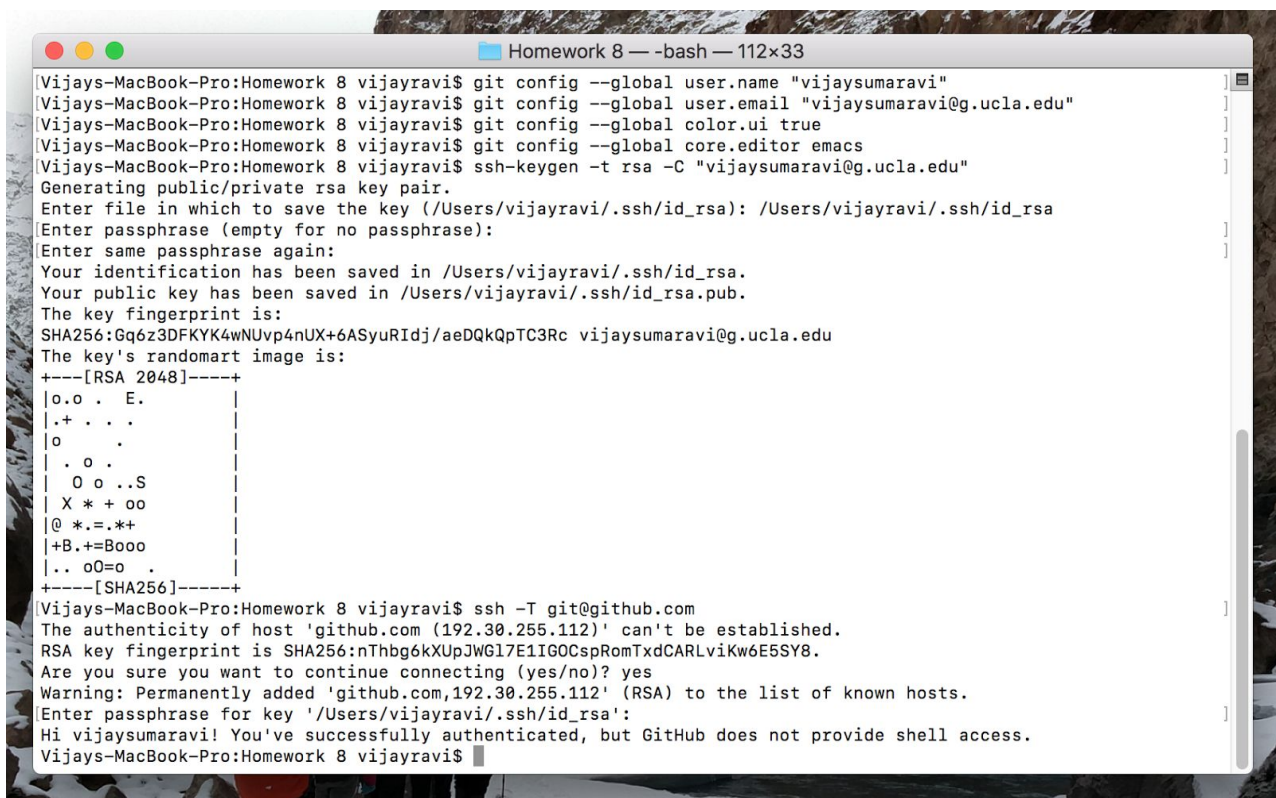
NAME: VIJAY RAVI

UID:

805033666

STEP 1: Create an account on <https://github.com/>. Account created: [vijaysumaravi](#)

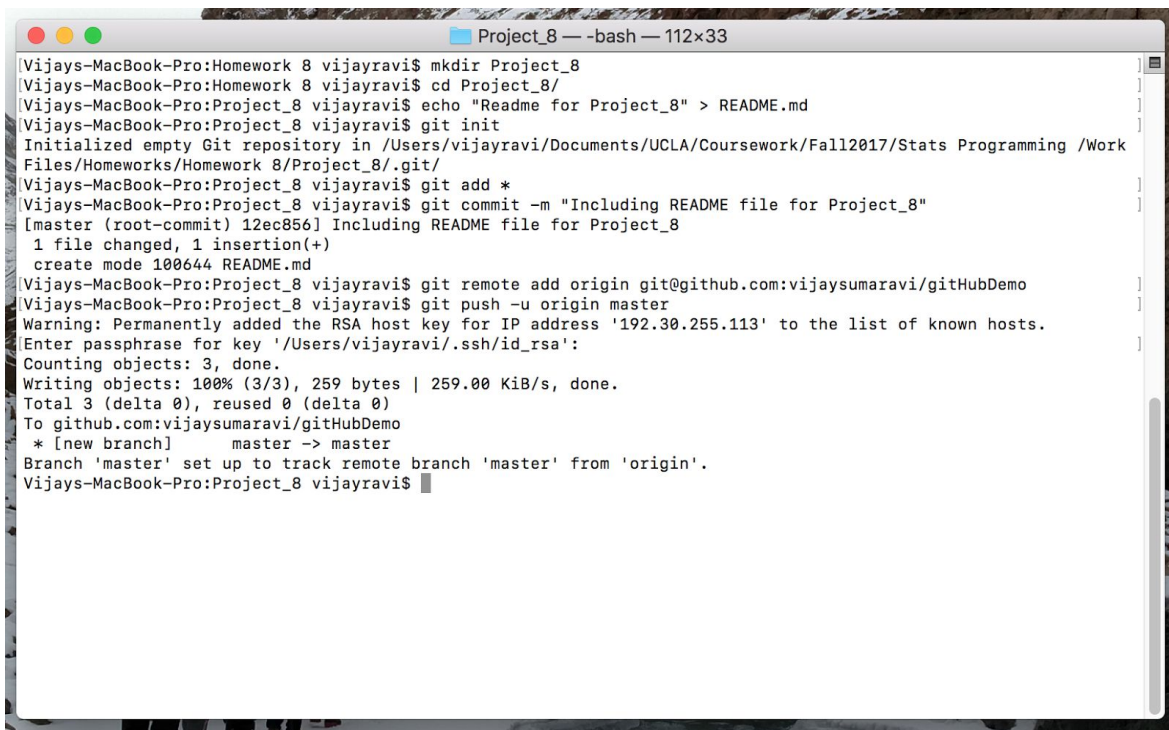
STEP 2: Use the following commands as in the screenshot to set up GITHUB on your system.



```
Vijays-MacBook-Pro:Homework 8 vijayravi$ git config --global user.name "vijaysumaravi"
Vijays-MacBook-Pro:Homework 8 vijayravi$ git config --global user.email "vijaysumaravi@ucla.edu"
Vijays-MacBook-Pro:Homework 8 vijayravi$ git config --global color.ui true
Vijays-MacBook-Pro:Homework 8 vijayravi$ git config --global core.editor emacs
Vijays-MacBook-Pro:Homework 8 vijayravi$ ssh-keygen -t rsa -C "vijaysumaravi@ucla.edu"
Generating public/private rsa key pair.
Enter file in which to save the key (/Users/vijayravi/.ssh/id_rsa): /Users/vijayravi/.ssh/id_rsa
[Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /Users/vijayravi/.ssh/id_rsa.
Your public key has been saved in /Users/vijayravi/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:Gq6z3DFKYK4wNUvp4nUX+6ASyurIdj/aeDQkQpTC3Rc vijaysumaravi@ucla.edu
The key's randomart image is:
+----[RSA 2048]-----+
|o.o . E. |
|.+. . . |
|o . |
|. o . |
| O o ..S |
| X * + oo |
|@ *. =.*+ |
|+B.+ =Booo |
|.. oO=o . |
+----[SHA256]-----+
Vijays-MacBook-Pro:Homework 8 vijayravi$ ssh -T git@github.com
The authenticity of host 'github.com (192.30.255.112)' can't be established.
RSA key fingerprint is SHA256:nThbg6kXUpJWG17E1IGOCspRomTxdCARLviKw6E5SY8.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'github.com,192.30.255.112' (RSA) to the list of known hosts.
Enter passphrase for key '/Users/vijayravi/.ssh/id_rsa':
Hi vijaysumaravi! You've successfully authenticated, but GitHub does not provide shell access.
Vijays-MacBook-Pro:Homework 8 vijayravi$
```

STEP 3: Creating a new Repository from scratch

- Create a new repository in <https://github.com/>
- I have named the repo as “gitHubDemo”
- Follow the following steps in the screenshot to setup the new project, “Project_8” to the repository.



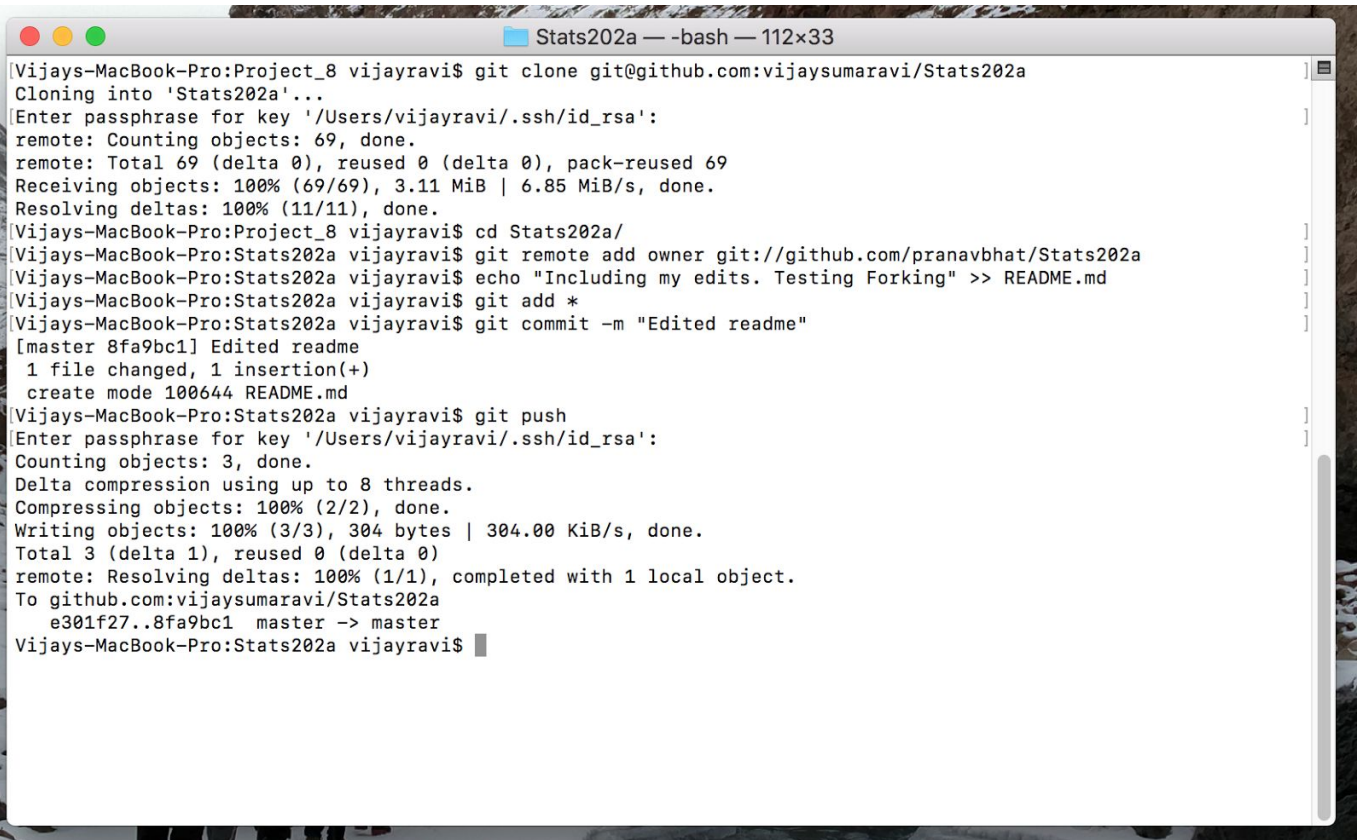
```
Vijays-MacBook-Pro:Homework 8 vijayravi$ mkdir Project_8
Vijays-MacBook-Pro:Homework 8 vijayravi$ cd Project_8/
Vijays-MacBook-Pro:Project_8 vijayravi$ echo "Readme for Project_8" > README.md
Vijays-MacBook-Pro:Project_8 vijayravi$ git init
Initialized empty Git repository in /Users/vijayravi/Documents/UCLA/Coursework/Fall12017/Stats Programming /Work
Files/Homeworks/Homework 8/Project_8/.git/
Vijays-MacBook-Pro:Project_8 vijayravi$ git add *
Vijays-MacBook-Pro:Project_8 vijayravi$ git commit -m "Including README file for Project_8"
[master (root-commit) 12ec856] Including README file for Project_8
 1 file changed, 1 insertion(+)
 create mode 100644 README.md
Vijays-MacBook-Pro:Project_8 vijayravi$ git remote add origin git@github.com:vijaysumaravi/gitHubDemo
Vijays-MacBook-Pro:Project_8 vijayravi$ git push -u origin master
Warning: Permanently added the RSA host key for IP address '192.30.255.113' to the list of known hosts.
Enter passphrase for key '/Users/vijayravi/.ssh/id_rsa':
Counting objects: 3, done.
Writing objects: 100% (3/3), 259 bytes | 259.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To github.com:vijaysumaravi/gitHubDemo
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
Vijays-MacBook-Pro:Project_8 vijayravi$
```

STEP 4: Continuing development and keeping the repository in sync with local development environment.

- Once a piece of developed code is tested and stable follow the below mentioned steps to push the changes to the repository.
- git add filename.extension
- git commit -m “Pushing new feature X”
- git push

STEP 5: Forking someone else's repository.

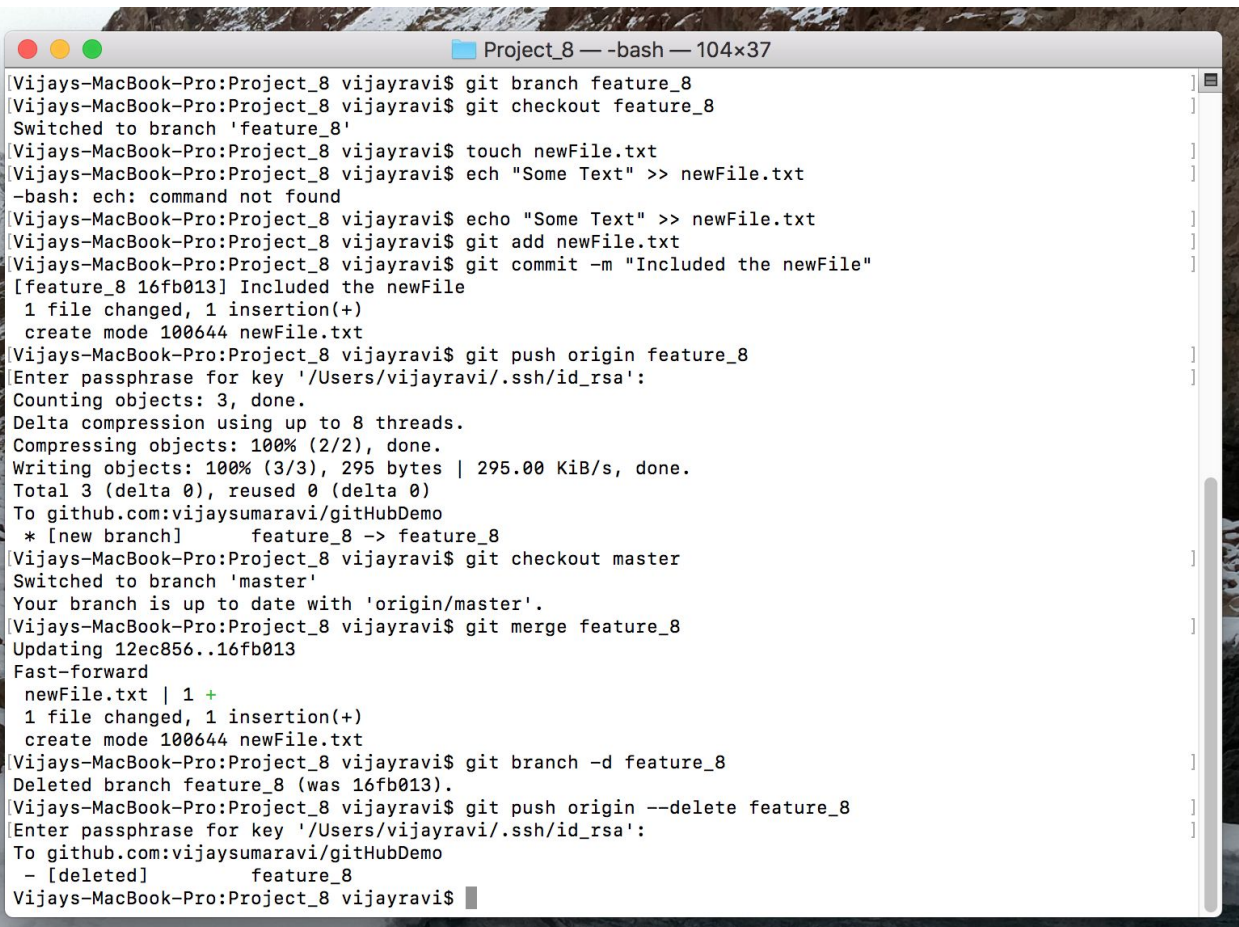
- Fork the repository on <https://github.com>
- Clone the repository to the local system and continue development, push changes.
- I have forked "Stats202a" from pranavbhat and changed the README.md file.



```
Stats202a — -bash — 112x33
[Vijays-MacBook-Pro:Project_8 vijayravi$ git clone git@github.com:vijaysumaravi/Stats202a
Cloning into 'Stats202a'...
[Enter passphrase for key '/Users/vijayravi/.ssh/id_rsa':
remote: Counting objects: 69, done.
remote: Total 69 (delta 0), reused 0 (delta 0), pack-reused 69
Receiving objects: 100% (69/69), 3.11 MiB | 6.85 MiB/s, done.
Resolving deltas: 100% (11/11), done.
[Vijays-MacBook-Pro:Project_8 vijayravi$ cd Stats202a/
[Vijays-MacBook-Pro:Stats202a vijayravi$ git remote add owner git://github.com/pranavbhat/Stats202a
[Vijays-MacBook-Pro:Stats202a vijayravi$ echo "Including my edits. Testing Forking" >> README.md
[Vijays-MacBook-Pro:Stats202a vijayravi$ git add *
[Vijays-MacBook-Pro:Stats202a vijayravi$ git commit -m "Edited readme"
[master 8fa9bc1] Edited readme
 1 file changed, 1 insertion(+)
 create mode 100644 README.md
[Vijays-MacBook-Pro:Stats202a vijayravi$ git push
[Enter passphrase for key '/Users/vijayravi/.ssh/id_rsa':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 304 bytes | 304.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:vijaysumaravi/Stats202a
 e301f27..8fa9bc1 master -> master
[Vijays-MacBook-Pro:Stats202a vijayravi$
```

STEP 6: Branching

- Creating a new feature branch.
- Developing and Testing in the branch.
- Merging development in the new branch on to the master branch.
- Deleting the new feature branch.

A terminal window titled "Project_8 — -bash — 104x37" showing a series of Git commands and their outputs. The user creates a new branch 'feature_8', adds a new file 'newFile.txt', commits it, pushes it to GitHub, merges it back to 'master', and finally deletes the 'feature_8' branch.

```
[Vijays-MacBook-Pro:Project_8 vijayravi$ git branch feature_8
Vijays-MacBook-Pro:Project_8 vijayravi$ git checkout feature_8
Switched to branch 'feature_8'
Vijays-MacBook-Pro:Project_8 vijayravi$ touch newFile.txt
Vijays-MacBook-Pro:Project_8 vijayravi$ ech "Some Text" >> newFile.txt
-bash: ech: command not found
Vijays-MacBook-Pro:Project_8 vijayravi$ echo "Some Text" >> newFile.txt
Vijays-MacBook-Pro:Project_8 vijayravi$ git add newFile.txt
Vijays-MacBook-Pro:Project_8 vijayravi$ git commit -m "Included the newFile"
[feature_8 16fb013] Included the newFile
 1 file changed, 1 insertion(+)
 create mode 100644 newFile.txt
Vijays-MacBook-Pro:Project_8 vijayravi$ git push origin feature_8
Enter passphrase for key '/Users/vijayravi/.ssh/id_rsa':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 295 bytes | 295.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To github.com:vijaysumaravi/gitHubDemo
 * [new branch]   feature_8 -> feature_8
Vijays-MacBook-Pro:Project_8 vijayravi$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
Vijays-MacBook-Pro:Project_8 vijayravi$ git merge feature_8
Updating 12ec856..16fb013
Fast-forward
 newFile.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 newFile.txt
Vijays-MacBook-Pro:Project_8 vijayravi$ git branch -d feature_8
Deleted branch feature_8 (was 16fb013).
Vijays-MacBook-Pro:Project_8 vijayravi$ git push origin --delete feature_8
Enter passphrase for key '/Users/vijayravi/.ssh/id_rsa':
To github.com:vijaysumaravi/gitHubDemo
 - [deleted]      feature_8
Vijays-MacBook-Pro:Project_8 vijayravi$
```