cse15lfa23

Lab 4 Report

step 4: Log into ieng6

Command: `ssh cse15lfa23ld@ieng6.ucsd.edu <enter>`

```
speedpotato@goodboi:/mnt/c/Users/sangd/Documents/ucsd/fall2023/cse15l/cse15lfa23-SangDo-Lab$ ssh cs15lfa23ld@ieng6.ucsd.edu
(cs15lfa23ld@ieng6.ucsd.edu) Password:
Last login: Sat Oct 21 18:46:40 2023 from 100.83.93.53
=========================== NOTICE ===============================
Authorized use of this system is limited to password-authenticated
usernames which are issued to individuals and are for the sole use of
the person to whom they are issued.

Privacy notice: be aware that computer files, electronic mail and
accounts are not private in an absolute sense.  You are responsible
for adhering to the ETS Acceptable Use Policies, which you can review at:
https://blink.ucsd.edu/faculty/instruction/tech-guide/policies/ets-acceptable-use-policies.html
=================================================================
```

```
Hello cs15lfa23ld, you are currently logged into ieng6-202.ucsd.edu

You are using 0% CPU on this system

Cluster Status
Hostname       Time      #Users  Load   Averages
ieng6-201    17:30:01     17    29.05,  30.17,  30.54
ieng6-202    17:30:01     15    4.23,   4.62,   5.53
ieng6-203    17:30:02     12    6.47,   6.79,   7.08



Sat Nov 18, 2023  5:30pm - Prepping cs15lfa23
[cs15lfa23ld@ieng6-202]:~:121$ ls
```

These 2 snippets below are for resubmission. `ssh key` was added so I could log in to `ieng6` without typing password

```
speedpotato@goodboi:/mnt/c/Users/sangd$ ssh cs15lfa23ld@ieng6.ucsd.edu
Last login: Tue Nov 14 13:08:17 2023 from its-cseb270-26.ucsd.edu
============================= NOTICE ==============================
Authorized use of this system is limited to password-authenticated
usernames which are issued to individuals and are for the sole use of
the person to whom they are issued.
```

```
Hello cs15lfa23ld, you are currently logged into ieng6-203.ucsd.edu

You are using 0% CPU on this system

Cluster Status
Hostname      Time      #Users  Load  Averages
ieng6-201   06:55:01    1  5.80,  5.43,  5.34
ieng6-202   06:55:01    4  0.01,  0.10,  0.12
ieng6-203   06:55:01    2  1.68,  1.85,  1.98


Tue Nov 28, 2023  6:56am - Prepping cs15lfa23
[cs15lfa23ld@ieng6-203]:~:172$ ls
```

step 5: Clone your fork of the repository from your Github account (using the SSH URL)

copy the SSH URL from github website

`git clone <ctrl>v`

`<ctrl>v` paste the coppied URL into my terminal

```
[cs15lfa23ld@ieng6-202]:~:129$ ls
perl5   tutor  wavelet
[cs15lfa23ld@ieng6-202]:~:130$ git clone git@github.com:sangpotado/cse15llab7.git
Cloning into 'cse15llab7'...
Warning: Permanently added the RSA host key for IP address '140.82.112.4' to the list of known hosts.
remote: Enumerating objects: 62, done.
remote: Counting objects: 100% (28/28), done.
remote: Compressing objects: 100% (14/14), done.
remote: Total 62 (delta 17), reused 14 (delta 14), pack-reused 34
Receiving objects: 100% (62/62), 377.13 KiB | 1.46 MiB/s, done.
Resolving deltas: 100% (23/23), done.
[cs15lfa23ld@ieng6-202]:~:131$ ▯
```

step 6: Run the tests, demonstrating that they fail

I used `<tab>` so the terminal can help me finish the words instead of typing them all out by myself

`cd cs<tab><enter>` –> going into the lab folder

`ls` –> list out the files, because I don't remember exactly the file names

`bash t<tab><enter>` –> run `bash test.sh`

```
[cs15lfa23ld@ieng6-202]:~:131$ cd cse15llab7/
[cs15lfa23ld@ieng6-202]:cse15llab7:132$ ls
ListExamples.java  ListExamplesTests.java  lib  test.sh
[cs15lfa23ld@ieng6-202]:cse15llab7:133$ bash test.sh
JUnit version 4.13.2
..E
Time: 0.539
There was 1 failure:
1) testMerge2(ListExamplesTests)
org.junit.runners.model.TestTimedOutException: test timed out after 500 milliseconds
        at ListExamples.merge(ListExamples.java:44)
        at ListExamplesTests.testMerge2(ListExamplesTests.java:19)

FAILURES!!!
Tests run: 2,  Failures: 1
                                        ▯
```

step 7: Edit the code file to fix the failing test

Command `vim L<tab>.ja<tab><enter>` –> call `vim` to edit file, there're 2 files whose names contain `ListExample`, so first `<tab>` stopped there, I continued with the name `.ja` and let the 2nd `<tab>` finish.

`[cs15lfa23ld@ieng6-202]:cse15llab7:134$ vim ListExamples.java`

Once inside `vim`, I typed:

`/change<enter><down><right><right>r2<esc>:wq<enter>`

`/change` –> search for the word "change"

`<enter>` –> to stop searching, alternatively, I could press `<esc>`

`<down><right><right>` –> move to the character I want to change, which is '1' of "index1"

`r2` –> replace '1' with '2'

`<esc>:wq<enter>` –> escape replace mode, then write and quit

```
            index1 += 1;
        }
        else {
            result.add(list2.get(index2));
            index2 += 1;
        }
    }
    while(index1 < list1.size()) {
        result.add(list1.get(index1));
        index1 += 1;
    }
    while(index2 < list2.size()) {
        result.add(list2.get(index2));
        // change index1 below to index2 to fix test
        index2 += 1;
    }
    return result;
}


}
/change
```

step 8: Run the tests, demonstrating that they now succeed

`<up><up><enter>` -> `bash test.sh` is up 2 in the history

```
[cs15lfa23ld@ieng6-202]:cse15llab7:135$ bash test.sh
JUnit version 4.13.2
..
Time: 0.014

OK (2 tests)
```

step 9: Commit and push the resulting change to your Github account (you can pick any commit message!)

`git add .` -> stage all the files which were changed

`git commit -m "done with lab4"` -> commit the change with the message

`git push` -> push the change to Github server

```
[cs15lfa23ld@ieng6-202]:cse15llab7:136$ git add .
[cs15lfa23ld@ieng6-202]:cse15llab7:137$ git commit -m "done with lab4"
[main 6303fbb] done with lab4
 Committer: Sang H Do <cs15lfa23ld@ieng6-202.ucsd.edu>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

 1 file changed, 1 insertion(+), 1 deletion(-)
[cs15lfa23ld@ieng6-202]:cse15llab7:138$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (1/1), done.
Writing objects: 100% (3/3), 302 bytes | 302.00 KiB/s, done.
Total 3 (delta 2), reused 2 (delta 2), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To github.com:sangpotado/cse15llab7.git
   13b3fcb..6303fbb  main -> main
```

*Note: I did not include `<enter>` in the commands above, because pressing `<enter>` is mandatory for every command, there's no need to repeat the obvious