

# cse15l-lab-reports

## Competition Steps

### Strategy

My trick was to have all the shell commands in a text file and copy pasting it into the terminal because I noticed that it automatically parsed the different lines of commands into individual commands, and it bypassed your need to press <Enter> . I split it up into sections.

Note - I made sure it was allowed to do so.

Here is the screenshot of things I copy-pasted onto google docs (ready to execute the lab tasks as fast as possible)

```
ssh cs15lwi23aja@ieng6.ucsd.edu
git clone git@github.com:adityaparmarr/lab7.git
cd lab7
javac -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar *.java
java -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar org.junit.runner.JUnitCore
ListExamplesTests
```

```
index1 += 1;
```

```
git add ListExamples.java
git commit -m "a"
git push
```

### Thought Process for Strategically Copy Pasting Commands onto the Terminal

1. First I copied just the `ssh ssh cs15lwi23aja@ieng6.ucsd.edu` command because it was inconsistent if I tried to paste all the other commands along with this.
2. Then, I copied `cd` and the JUnit tests (compiling and running) onto the clipboard.

```
cd lab7
javac -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar *.java
java -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar org.junit.runner.J
```

3. Then I nano'd into ListExamples.java (using <Tab> s along the way to speed it up) as described using the keystrokes later in this document.
4. Then I used the <Ctrl+W> (where is) command to find the wrong `index1 +=` and replaced it with `index2 +=` using
5. Lastly, I copy-pasted all the git repository related steps (add, commit, and push)

```
git add ListExamples.java
git commit -m "a"
git push
```

Note - on my laptop, the <Enter> etc. are different, and the lab computer automatically ran all the commands after I pasted the commands in the terminal. I am unsure if it is a windows or a Visual Studio Code thing or just a ZSH (mac) terminal thing.

## Step 4 - Log into ieng6

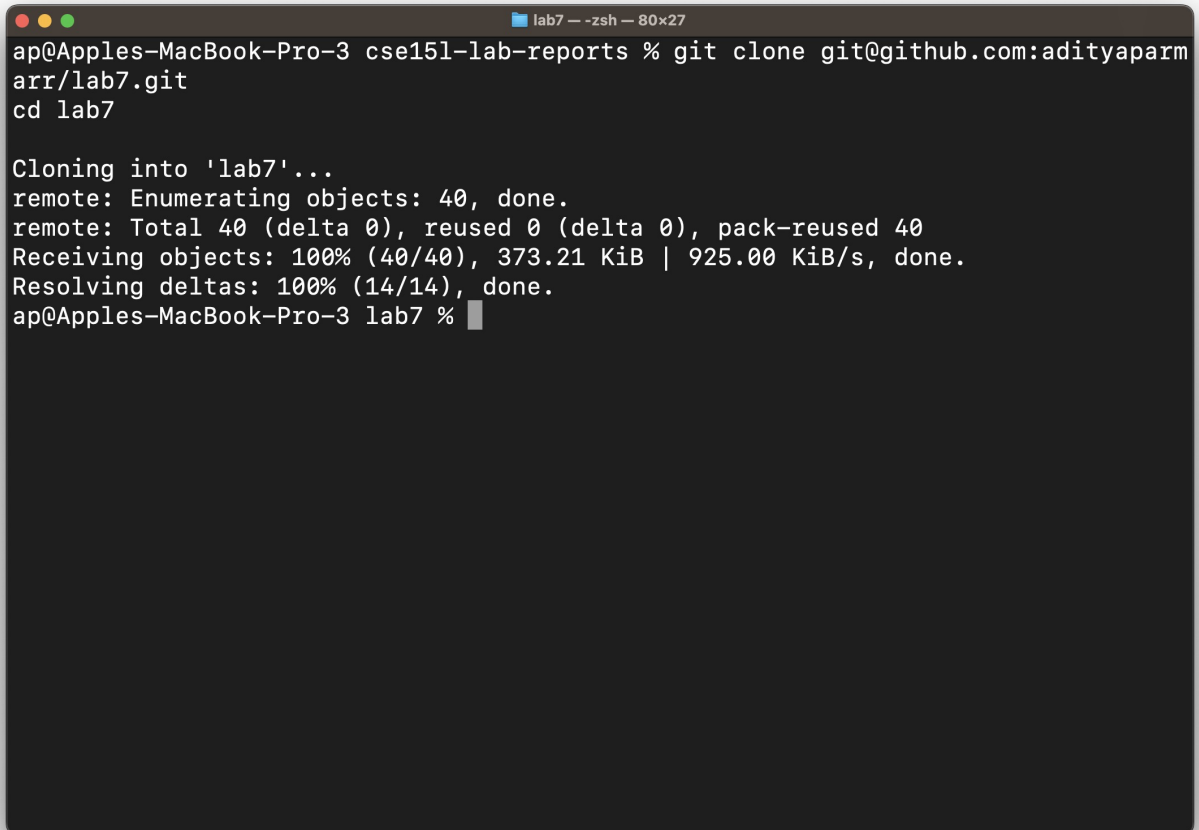
---

```
# copy the command
# Keystrokes - <Ctrl-V><Enter>
ssh ssh cs15lwi23aja@ieng6.ucsd.edu `<Enter>`
```

## Step 5 - Clone your fork of the repository from your Github account

---

```
# copy paste
# Keystrokes - <Ctrl-V><Enter>
git clone git@github.com:adityaparmarr/lab7.git
cd lab7
```

A terminal window titled 'lab7 - zsh - 80x27' on a dark background. The prompt is 'ap@Apples-MacBook-Pro-3 cse151-lab-reports %'. The user enters 'git clone git@github.com:adityaparmarr/lab7.git' and 'cd lab7'. The output shows the cloning process: 'Cloning into 'lab7'...', 'remote: Enumerating objects: 40, done.', 'remote: Total 40 (delta 0), reused 0 (delta 0), pack-reused 40', 'Receiving objects: 100% (40/40), 373.21 KiB | 925.00 KiB/s, done.', and 'Resolving deltas: 100% (14/14), done.'. The prompt returns to 'ap@Apples-MacBook-Pro-3 lab7 %' with a cursor.

```
ap@Apples-MacBook-Pro-3 cse151-lab-reports % git clone git@github.com:adityaparmarr/lab7.git
cd lab7

Cloning into 'lab7'...
remote: Enumerating objects: 40, done.
remote: Total 40 (delta 0), reused 0 (delta 0), pack-reused 40
Receiving objects: 100% (40/40), 373.21 KiB | 925.00 KiB/s, done.
Resolving deltas: 100% (14/14), done.
ap@Apples-MacBook-Pro-3 lab7 %
```

## Step 6 - Run the tests, demonstrating that they fail

---

```
# Copy the junit test commands
# Keystrokes - <Ctrl-V><Enter>
javac -cp .:lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar *.java
java -cp .:lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar org.junit.runner.JUnit
```

```
lab7 — zsh — 80x27
remote: Enumerating objects: 40, done.
remote: Total 40 (delta 0), reused 0 (delta 0), pack-reused 40
Receiving objects: 100% (40/40), 373.21 KiB | 925.00 KiB/s, done.
Resolving deltas: 100% (14/14), done.
ap@Apples-MacBook-Pro-3 lab7 % javac -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar *.java
java -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar org.junit.runner.JUnit4 Core ListExamplesTests

JUnit version 4.13.2
.E.E
Time: 1.075
There were 2 failures:
1) testMerge1(ListExamplesTests)
org.junit.runners.model.TestTimedOutException: test timed out after 500 milliseconds
    at app//ListExamples.merge(ListExamples.java:39)
    at app//ListExamplesTests.testMerge1(ListExamplesTests.java:12)
2) testMerge2(ListExamplesTests)
org.junit.runners.model.TestTimedOutException: test timed out after 500 milliseconds
    at app//ListExamples.merge(ListExamples.java:39)
    at app//ListExamplesTests.testMerge2(ListExamplesTests.java:19)

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

## Step 7 - Edit the code file to fix the failing test

Can't copy paste here, so I used nano.

```
# Keystrokes - <Ctrl-W> index1 += <Backspace> index2 <Ctrl-O> <Enter> <Ctrl-X>
nano ListEx<Tab>.java
# Repeating the same for index1 instead of index2 etc
```

```

lab7 — -zsh — 80x27
Receiving objects: 100% (40/40), 373.21 KiB | 925.00 KiB/s, done.
Resolving deltas: 100% (14/14), done.
ap@Apples-MacBook-Pro-3 lab7 % javac -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar *.java
java -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar org.junit.runner.JUnitCore ListExamplesTests

JUnit version 4.13.2
.E.E
Time: 1.075
There were 2 failures:
1) testMerge1(ListExamplesTests)
org.junit.runners.model.TestTimedOutException: test timed out after 500 milliseconds
    at app//ListExamples.merge(ListExamples.java:39)
    at app//ListExamplesTests.testMerge1(ListExamplesTests.java:12)
2) testMerge2(ListExamplesTests)
org.junit.runners.model.TestTimedOutException: test timed out after 500 milliseconds
    at app//ListExamples.merge(ListExamples.java:39)
    at app//ListExamplesTests.testMerge2(ListExamplesTests.java:19)

FAILURES!!!
Tests run: 2, Failures: 2

ap@Apples-MacBook-Pro-3 lab7 % nano ListExamples.java
ap@Apples-MacBook-Pro-3 lab7 %

```

## Step 8 - Run the tests, demonstrating that they now succeed

```

javac List<Tab>.java
# Copy paste the JUnit tests as we did earlier
# Keystrokes - <Ctrl-V><Enter>
javac -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar *.java
java -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar org.junit.runner.JUnitCore ListExamplesTests

```

```

ap@Apples-MacBook-Pro-3 lab7 % javac -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar *.java
java -cp ./lib/hamcrest-core-1.3.jar:lib/junit-4.13.2.jar org.junit.runner.JUnitCore ListExamplesTests

JUnit version 4.13.2
..
Time: 0.011

OK (2 tests)

```

## Step 9 - Commit and push the resulting change to your Github account

```

# Copy Paste the git commands from the google doc
# Keystrokes - <Ctrl-V><Enter>
git add ListExamples.java

```

```
git commit -m "a"  
git push
```

```
● ap@Apples-MacBook-Pro-3 lab7 % git add ListExamples.java  
git commit -m "a"  
git push  
  
[main 7702731] "a"  
1 file changed, 3 insertions(+), 3 deletions(-)  
Enumerating objects: 5, done.  
Counting objects: 100% (5/5), done.  
Delta compression using up to 4 threads  
Compressing objects: 100% (3/3), done.  
Writing objects: 100% (3/3), 310 bytes | 310.00 KiB/s, done.  
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0  
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.  
To github.com:adityaparmarr/lab7.git  
170d4f0..7702731 main -> main  
○ ap@Apples-MacBook-Pro-3 lab7 %
```