

cse15l-lab-reports

Step 4

Screenshot

```
parthshinde@Parths-MacBook-Air-3 lab-report-4 % ssh pshinde@ieng6.ucsd.edu
Last login: Wed May 22 13:49:34 2024 from 100.83.42.187
Hello pshinde, you are currently logged into ieng6-201.ucsd.edu

You are using 0% CPU on this system

Cluster Status
Hostname      Time      #Users  Load  Averages
ieng6-201     13:55:01    2  0.00,  0.22,  0.33
ieng6-202     13:55:01    8  0.00,  0.06,  0.13
ieng6-203     13:55:01    7  0.00,  0.14,  0.28

To begin work for one of your courses [ cs15lsp24 ], type its name
at the command prompt. (For example, "cs15lsp24", without the quotes).

To see all available software packages, type "prep -l" at the command prompt,
or "prep -h" for more options.
[pshinde@ieng6-201]:~:25$ █
```

Keys Pressed: ssh<space>pshinde@ieng6.ucsd.edu<enter>

Summary: This command logs you into the ieng6 server.

Step 5

Screenshot

```
[pshinde@ieng6-201]:~:26$ git clone git@github.com:ParthShinde04/lab7.git
Cloning into 'lab7'...
remote: Enumerating objects: 62, done.
remote: Counting objects: 100% (2/2), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 62 (delta 0), reused 1 (delta 0), pack-reused 60
Receiving objects: 100% (62/62), 376.77 KiB | 1.48 MiB/s, done.
Resolving deltas: 100% (23/23), done.
[pshinde@ieng6-201]:~:27$ █
```

Keys Pressed:

git<space>clone<space>git@github.com:ParthShinde04/lab7.git<enter>cd<space>lab7<enter>

Summary: These commands clone your forked repository from Github using the SSH URL and change the directory to the cloned repository.

Step 6

Screenshot

```
[pshinde@ieng6-201]:~:30$ cd lab7
[pshinde@ieng6-201]:lab7:31$ bash test.sh
JUnit version 4.13.2
..E
Time: 0.52
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
```

Keys pressed: bash<space>test.sh<enter>

Summary: This command runs the bash file that compiles the test files with the necessary classpath and then runs the JUnit tests, showing that they fail.

Step 7

Screenshot

```

import java.util.ArrayList;
import java.util.List;

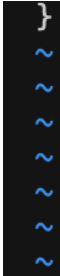
interface StringChecker { boolean checkString(String s); }

class ListExamples {

    // Returns a new list that has all the elements of the input list for which
    // the StringChecker returns true, and not the elements that return false, in
    // the same order they appeared in the input list;
    static List<String> filter(List<String> list, StringChecker sc) {
        List<String> result = new ArrayList<>();
        for(String s: list) {
            if(sc.checkString(s)) {
                result.add(0, s);
            }
        }
        return result;
    }

    // Takes two sorted list of strings (so "a" appears before "b" and so on),
    // and return a new list that has all the strings in both list in sorted order.
    static List<String> merge(List<String> list1, List<String> list2) {
        List<String> result = new ArrayList<>();
        int index1 = 0, index2 = 0;
        while(index1 < list1.size() && index2 < list2.size()) {
            if(list1.get(index1).compareTo(list2.get(index2)) < 0) {
                result.add(list1.get(index1));
                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
            index1 += 1;
        }
        return result;
    }
}

```



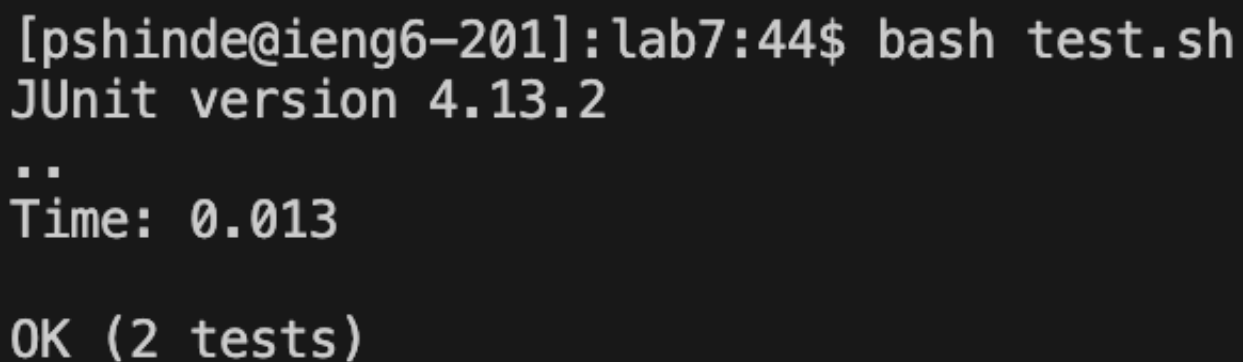
Keys Pressed:

```
vim<space>ListExamples.java<enter>
/merge<enter>
<down><down><down><down><down>
i<backspace><backspace><backspace><backspace>index2<space>+=<space>1;<esc>
:wq<enter>
```

Summary: These commands open the `ListExamples.java` file in vim, search for the `merge` method, navigate to the incorrect line, fix the error by changing `index1` to `index2`, and then save and exit vim.

Step 8

Screenshot



```
[pshinde@ieng6-201]:lab7:44$ bash test.sh
JUnit version 4.13.2
..
Time: 0.013

OK (2 tests)
```

Keys Pressed: `<up><up><enter>`

Summary: These arrow keys go back in history and run `bash test.sh` command again.

Step 9

Screenshot

```
[pshinde@ieng6-201]:lab7:50$ git add .
[pshinde@ieng6-201]:lab7:51$ git commit
[main ab60289] tests passed
  Committer: Parth Shinde <pshinde@ieng6-201.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

  3 files changed, 1 insertion(+), 1 deletion(-)
  create mode 100644 ListExample.java
  create mode 100644 ListExamples
[pshinde@ieng6-201]:lab7:52$ git push
Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 458 bytes | 229.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:ParthShinde04/lab7.git
   c5fc7df..ab60289  main -> main
[pshinde@ieng6-201]:lab7:53$ █
```

Keys Pressed:

```
git<space>add<space>.<enter>
git<space>commit<space>-m<space>"All<space>tests<space>passed"<enter>
git<space>push<enter>
```

Summary: These commands add the modified `ListExamples.java` file to the staging area, commit the changes with a message, and push the changes to your Github repository.