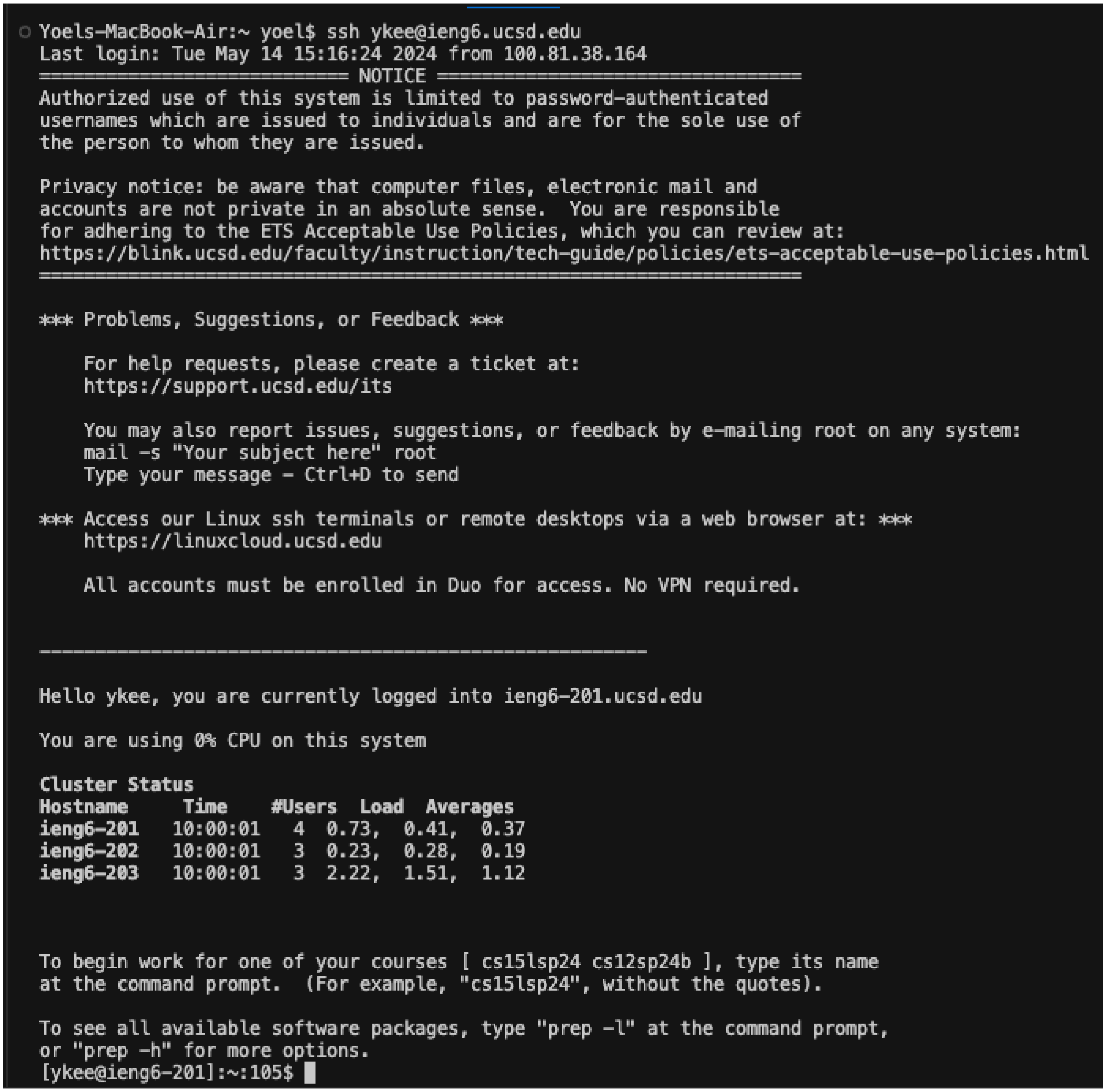
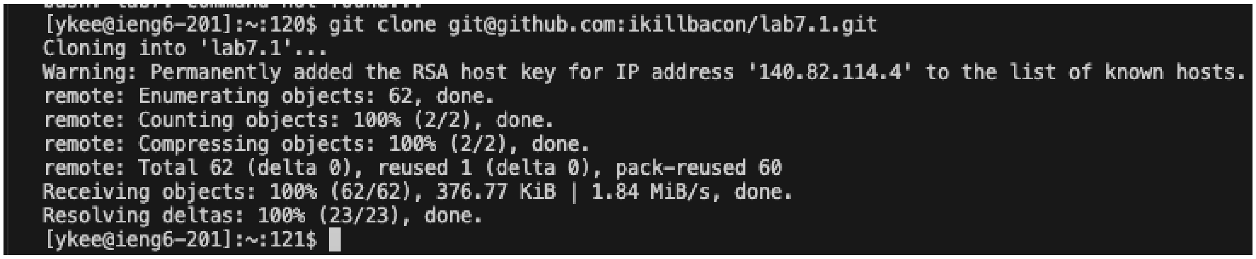
Step 4:



```
Yoels-MacBook-Air:~ yoel$ ssh ykee@ieng6.ucsd.edu
Last login: Tue May 14 15:16:24 2024 from 100.81.38.164
============================ 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
=====================================================================

*** Problems, Suggestions, or Feedback ***

    For help requests, please create a ticket at:
    https://support.ucsd.edu/its

    You may also report issues, suggestions, or feedback by e-mailing root on any system:
    mail -s "Your subject here" root
    Type your message - Ctrl+D to send

*** Access our Linux ssh terminals or remote desktops via a web browser at: ***
    https://linuxcloud.ucsd.edu

    All accounts must be enrolled in Duo for access. No VPN required.


-------------------------------------------------------


Hello ykee, 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   10:00:01   4  0.73,  0.41,  0.37
ieng6-202   10:00:01   3  0.23,  0.28,  0.19
ieng6-203   10:00:01   3  2.22,  1.51,  1.12



To begin work for one of your courses [ cs15lsp24 cs12sp24b ], 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.
[ykee@ieng6-201]:~:105$
```

<ssh ykee@ieng6.ucsd.edu>
Keys pressed: ssh<space>ykee<shift>2ieng6.ucsd.edu
Summary: ssh is the command for opening the remote server and ykee@ieng6.ucsd.edu is who is accessing the server.

Step 5:



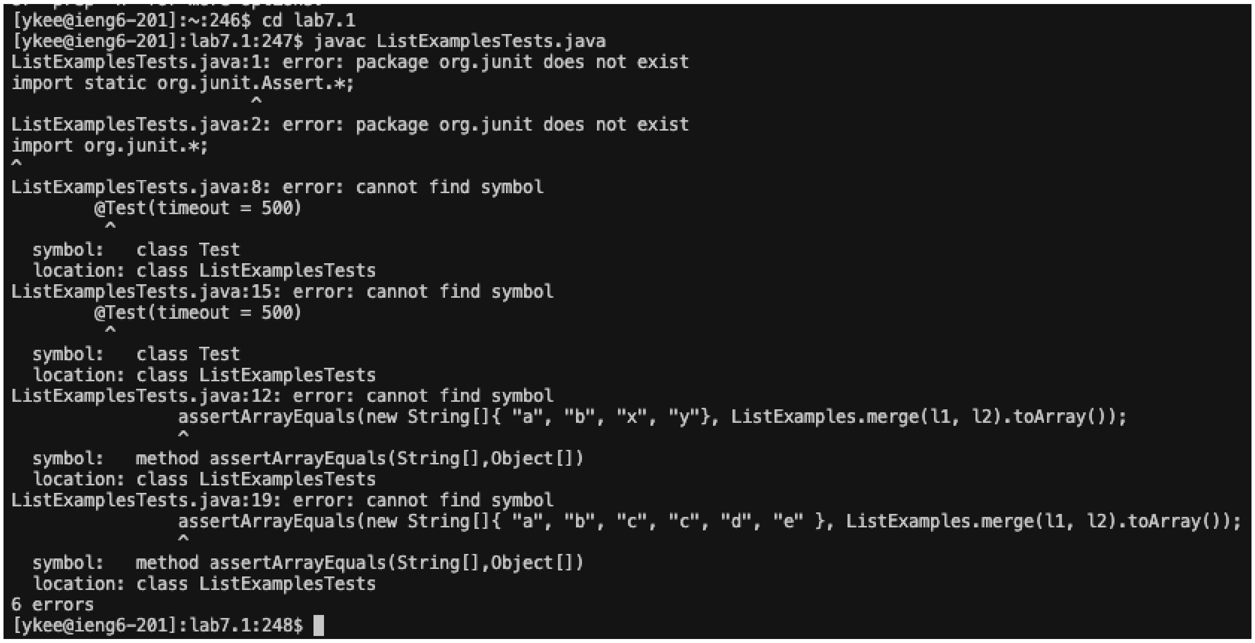
```
[ykee@ieng6-201]:~:120$ git clone git@github.com:ikillbacon/lab7.1.git
Cloning into 'lab7.1'...
Warning: Permanently added the RSA host key for IP address '140.82.114.4' to the list of known hosts.
remote: Enumerating objects: 62, done.
remote: Counting objects: 100% (2/2), done.
remote: Compressing 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 | 1.84 MiB/s, done.
Resolving deltas: 100% (23/23), done.
[ykee@ieng6-201]:~:121$ 
```

<git clone git@github.com:ikillbacon/lab7.1.git>

Keys pressed: git<space>clone<space>git<shift>2github.com<shift>;ikillbacon/lab7.1.git

Summary: it makes a copy of the repository on github onto the server.

Step 6:



```
[ykee@ieng6-201]:~:246$ cd lab7.1
[ykee@ieng6-201]:lab7.1:247$ javac ListExamplesTests.java
ListExamplesTests.java:1: error: package org.junit does not exist
import static org.junit.Assert.*;
                       ^
ListExamplesTests.java:2: error: package org.junit does not exist
import org.junit.*;
^
ListExamplesTests.java:8: error: cannot find symbol
        @Test(timeout = 500)
         ^
  symbol:   class Test
  location: class ListExamplesTests
ListExamplesTests.java:15: error: cannot find symbol
        @Test(timeout = 500)
         ^
  symbol:   class Test
  location: class ListExamplesTests
ListExamplesTests.java:12: error: cannot find symbol
                assertArrayEquals(new String[]{ "a", "b", "x", "y"}, ListExamples.merge(l1, l2).toArray());
                ^
  symbol:   method assertArrayEquals(String[],Object[])
  location: class ListExamplesTests
ListExamplesTests.java:19: error: cannot find symbol
                assertArrayEquals(new String[]{ "a", "b", "c", "c", "d", "e" }, ListExamples.merge(l1, l2).toArray());
                ^
  symbol:   method assertArrayEquals(String[],Object[])
  location: class ListExamplesTests
6 errors
[ykee@ieng6-201]:lab7.1:248$ 
```

<cd lab7.1>

Keys pressed: cd<space>lab7.1

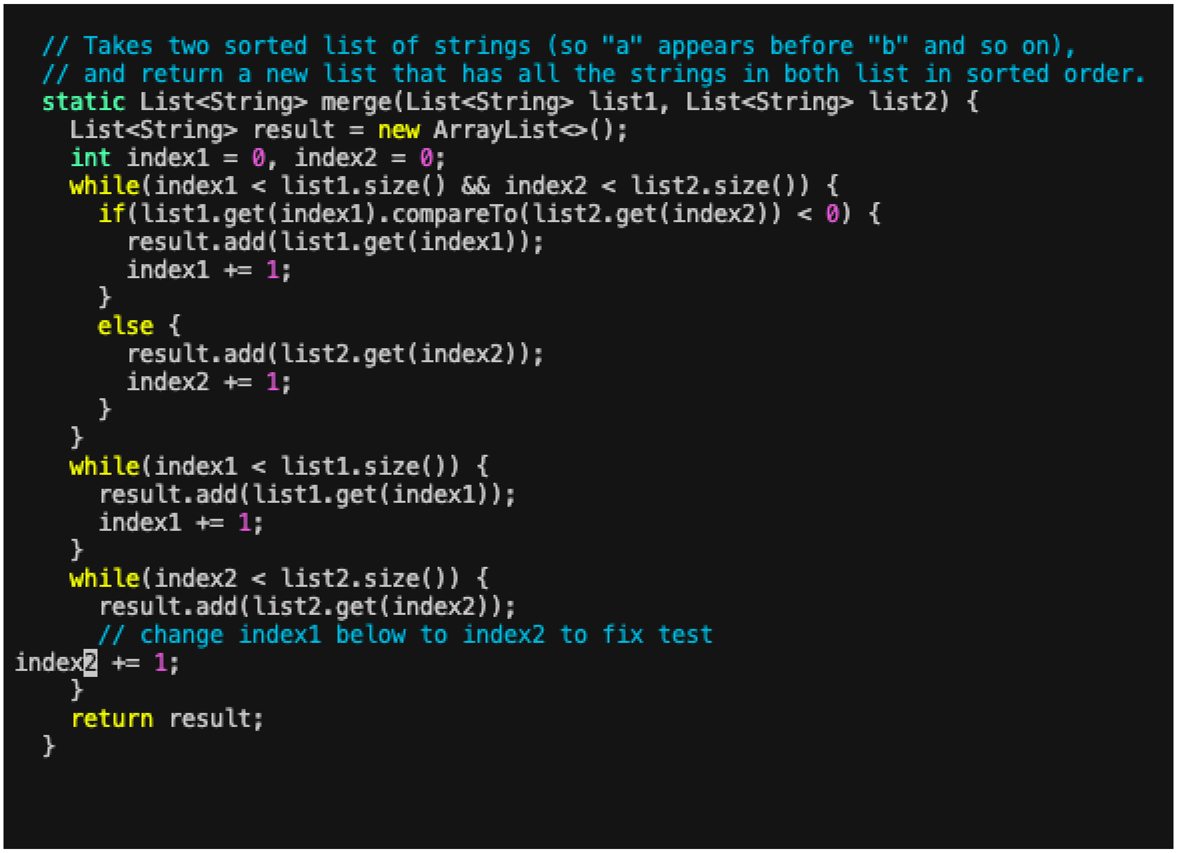
Summary: cd focuses into lab7.1 directory and you're able to focus on the files in the chosen directory.

<javac ListExamplesTests.java>

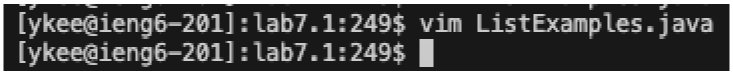
Keys pressed: javac<space><shift>list<shift>examples<shift>tests.java

Summary: javac runs the chosen file and gives an output in terminal

Step 7:



```
  // 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
index2 += 1;
    }
    return result;
  }
```



```
[ykee@ieng6-201]:lab7.1:249$ vim ListExamples.java
[ykee@ieng6-201]:lab7.1:249$ 
```

<vim ListExamples.java>

Keys pressed: vim<space><shift>list<shift>examples.java

Summary: vim enters and open the chosen file into the terminal

<43je<rightarrow>i2:w:q1!>

Keys pressed: 43je<rightarrow>i<backspace>2<esc><shift>:w<enter><shift>:q<shift>1<enter>

Summary: 43j: j is jump to next line and 43 is the number if lines jumped

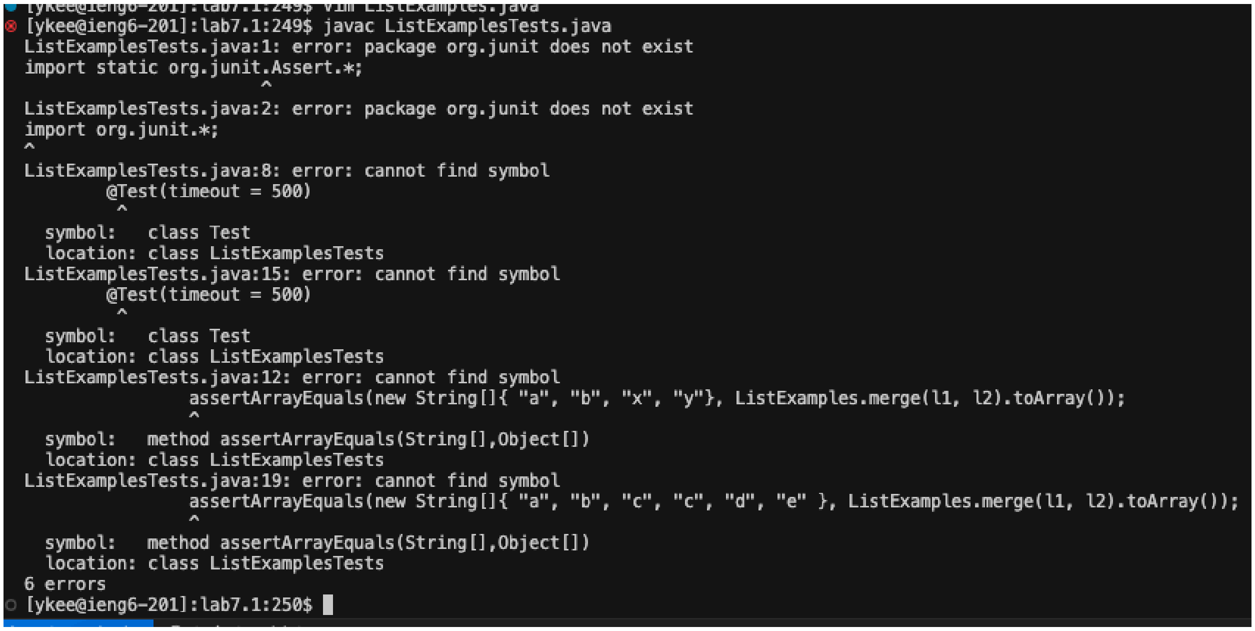
e: e goes to the end of the next word so it goes to end of index1

I: I enables editing within the terminal. Here there is a series of key presses to change 1 to 2. When editing is finished editing can be exited by pressing <esc>

w: ":w" saves whatever you edit from I before exiting vim

q!: ":q!" exits vim and discards and unsaved changes.

Step 8:



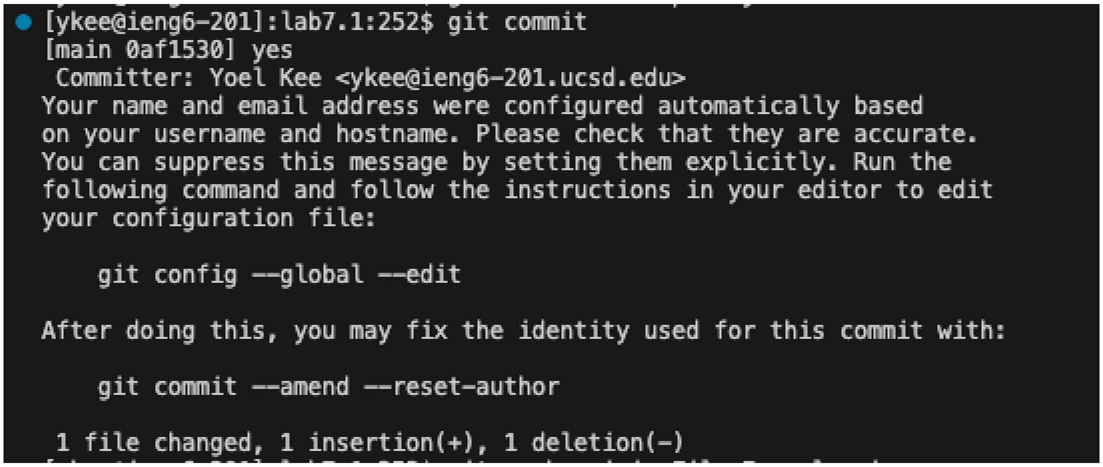
```
[ykee@ieng6-201]:lab7.1:249$ vim ListExamples.java
[ykee@ieng6-201]:lab7.1:249$ javac ListExamplesTests.java
ListExamplesTests.java:1: error: package org.junit does not exist
import static org.junit.Assert.*;
                       ^
ListExamplesTests.java:2: error: package org.junit does not exist
import org.junit.*;
^
ListExamplesTests.java:8: error: cannot find symbol
        @Test(timeout = 500)
         ^
  symbol:   class Test
  location: class ListExamplesTests
ListExamplesTests.java:15: error: cannot find symbol
        @Test(timeout = 500)
         ^
  symbol:   class Test
  location: class ListExamplesTests
ListExamplesTests.java:12: error: cannot find symbol
                assertArrayEquals(new String[]{ "a", "b", "x", "y"}, ListExamples.merge(l1, l2).toArray());
                ^
  symbol:   method assertArrayEquals(String[],Object[])
  location: class ListExamplesTests
ListExamplesTests.java:19: error: cannot find symbol
                assertArrayEquals(new String[]{ "a", "b", "c", "c", "d", "e" }, ListExamples.merge(l1, l2).toArray());
                ^
  symbol:   method assertArrayEquals(String[],Object[])
  location: class ListExamplesTests
6 errors
[ykee@ieng6-201]:lab7.1:250$ 
```

<javac ListExamplesTests.java>

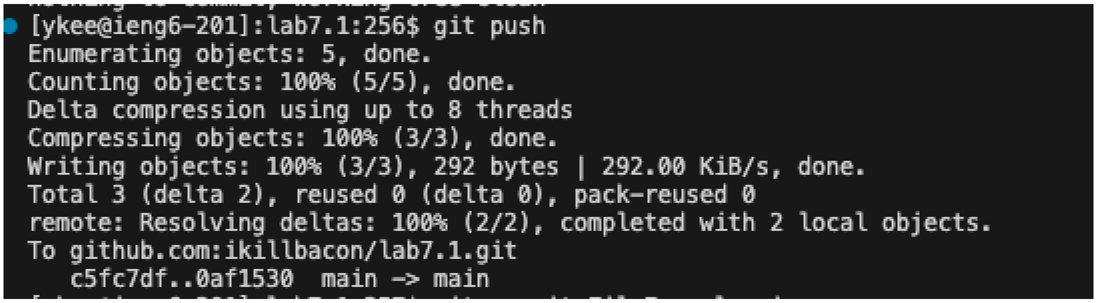
Keys pressed: javac<space><shift>list<shift>examples<shift>tests.java

Summary: javac runs the chosen file and outputs the results in the terminal

Step 9:



```
[ykee@ieng6-201]:lab7.1:252$ git commit
[main 0af1530] yes
 Committer: Yoel Kee <ykee@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

 1 file changed, 1 insertion(+), 1 deletion(-)
```



```
[ykee@ieng6-201]:lab7.1:256$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 292 bytes | 292.00 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:ikillbacon/lab7.1.git
   c5fc7df..0af1530  main -> main
```

<git commit>
Keys pressed: git<space>commit
Summary: git commit is a command where you save what changes you have done in a repository. A comment is made to describe the changes done within the files.

Keys pressed: iyes<esc><shift>;w<enter><shift>;q<shift>1<enter>
summary : I enters editing mode and yes is inputted and :w saves the changes and :q! Exits git commit.

<git push>
Keys pressed: git<space>push
Summary: git push takes the repository and replaces the unchanged files in github with the changed files.