LAB ASSIGNMENT 4

DUE TO NEXT LAB

1. Download the **notebook** project from moodle (which is similar to Music-organizer we worked on in class)and adapt it. Create a notebook and add some notes, checking that this method works as intended.

2. Implement a method to start with some predefined notes right away.

3. Modify your `showNote` method so that it prints a number in front of each note that corresponds to its index in the ArrayList.

4. Modify `showNote so` to print out an error message if the note number entered was not valid.

5. Implement `removeNote`. You may have to look at the API for java.util.ArrayList to find out how to do this.

6. Modify `removeNote` to print out an error message if the note number entered was not valid.

7. Try and implement the search method that looks for a particular note. You need to add code to print out either the note that was found or the string "Search term not found". Be sure to test your method with terms that are in the list, and ones which are not. Document your test cases.

8. How did you implement the search method? If you used a for-each loop or an iterator, first rewrite it to use a while loop. Within a single execution of the search method, the notes collection might be asked repeatedly how many notes it is currently storing. Does the value returned by size vary from one check to the next? Rewrite your search method so that the size is not checked unnecessarily, perhaps using a local variable. Check that your version gives the same results! What test cases will you need?

9. What other methods could be helpful in this context? Think of two and implement them.

10. Add on: Make a new class Notes with useful attributes and adapt the class `notebook` accordingly.