Lab 1b: Binary Search, Iteration and Recursion

1. In the bin_search.py file, review the bin_search_iter() code provided. There is a bug in the code provided, and perhaps you will spot it when you review the code. Regardless, in bin_search_tests.py, add tests – thinking about possible edge conditions. Correct the error in bin_search_iter().

2. In the bin_search.py file, complete the binary search recursive helper function to implement the binary search recursively.

3. In bin_search_tests.py, add tests for the bin_search_rec() function (you can also write tests for the helper function directly, but you do not need to). Are the set of tests different for the recursion version of the binary search function?

Submission/Grading

Ensure that the following file have been submitted to GitHub by the due date:

- **bin_search.py**
    - o   Updated per the instructions above

- **bin_search_tests.py**
    - o   Comprehensive test cases for the binary search functions