

CSCI 204 Binary Search Activity 1

Student name(s) _____

1. We discussed in our lecture the binary search algorithm used for sorted lists. That version of the search is iterative. You are asked to rewrite the iterative binary search function in a recursive fashion. Once you complete the function, run the test given at the course website, simply change the given iterative binary search to your recursive binary search. The test program should work exactly the same way.

Open the “listsearcher.py” file, locate the function “_dbinsearch(self, first, last, key)” in the BinarySearch class. The current version of the binary search is iterative, the same as we saw in the lecture notes. Rewrite the function in recursive form. Run the Python program “test_search.py” to see the result. You can also compare the timing of binary search with that of linear search by choosing the “searcher” at the top of the “test_search.py” file.