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Programming Exercise 5

Binary Search Tree

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Abstract

The problem we had to solve in programming assignment 5 was using Binary Search Tree(BTS) in replace of Linked List. We had to use Linked List for our assignment 4, so assignment 5 is basically an upgrade of assignment 4. This because we learn that Binary Search Tree is faster than Linked List, so the result from our assignment 5 showed up faster than in assignment 4, although I found that my number for each assignment have differed. My algorithm for assignment 5 are the same as assignment 4, with the exceptions of the changes necessary for the program to run with Binary Search Tree. These changes are using "search" and "insert," rather than "contains" and "add". Also, I had to change the name of my array from Linked List to instead reference my Binary Search Tree class.

Output:

run:

The words found: 1892645

Comparisons of words found: 14950610

The words not found: 64537

Comparisons of words not found: 741543

The average words found in comparisons to words: 7

The average of words not found in comparisons to words not found is: 11

BUILD SUCCESSFUL (total time: 10 seconds)