**Homework 2**

Binary search trees, AVL trees

Write a program that reads a text file and outputs a list of all words in alphabetical order. Each word should be displayed with a list of line numbers on which it occurs in the file. Use an AVL binary search tree to store the words seen.

Requirements:

1. The program must work for arbitrary large files sizes.
2. You must test the program using the file I will provide.
3. Each node is to have a linked list to store all of the line numbers. Use the list you created in assignment 1.
4. Make the tree a class with the necessary functions.

Example:

Input

Hello Bill,

Did you hear about Aunt Betty or

about Aunt White? I cannot believe that …

Output

about 2, 3

Aunt 2, 3

believe 3

Betty 2

Bill 1

cannot 3

Did 2

hear 2

Hello 1

I 2

or 2

that 3

White 3

you 2

…