## **Tongtong Tang**

**Programming Assignment5** 

AssignmentFive C202

April 11, 2017

In this assignment we will implement the second version of the spell checker. First, we Used the randomized dictionary (*random\_dictionary.txt*) given, read in the dictionary into an array of 26 Binary Search Trees (BST), one for each letter of the alphabet. Thus the first BST would contain only those words starting with letter 'a', while the last would contain only those words starting with letter 'z'.

Second, we read in the book (*oliver.txt*), we examined the first character of each word, and search (this method is already implemented in BinarySearchTee class) the word in one of the BST. For each word read from the book, see if it is in the corresponding BST. If it is not found, then output the word. This word is either misspelled, or not in the dictionary. The words in the dictionary and the book should be run through the String Parser we wrote in Assignment 4.

At the end of the program, we compute and display the average number of string comparisons for words that were found and the words that were not found.