**COMP610: Data Structures and Algorithms**

**Semester 1, 2018**

**Assignment 3-Task 2**

In this task, I design a binary search tree map for store the words and lines it showed up in the loaded document. My program able to read a file and generates a list of words used in that document. Also, it can provide all the line numbers on which a specific word is appeared. For verify I used the sample text as input.

How to use:

1. Input it to a Java IDE (Developed in Eclipse)
2. Use the Runnable

Sample Output:

Printing Original Document

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The itsy bitsy spider climbed up the waterspout.

Down came the rain

and washed the spider out.

Out came the sun

and dried up all the rain

and the itsy bitsy spider climbed up the spout again

Word used: [Again][All][And][Bitsy][Came][Climbed][Down][Dried][Itsy][Out][Rain][Spider][Spout][Sun][The][Up][Washed][Waterspout]

Word: [The] showed up at line: 1, 2, 3, 4, 5, 6

Again----------6

All----------5

And----------3, 5, 6

Bitsy----------1, 6

Came----------2, 4

Climbed----------1, 6

Down----------2

Dried----------5

Itsy----------1, 6

Out----------3, 4

Rain----------2, 5

Spider----------1, 3, 6

Spout----------6

Sun----------4

The----------1, 2, 3, 4, 5, 6

Up----------1, 5, 6

Washed----------3

Waterspout----------1