Assume the sizes of file1.txt is 𝑂(𝑛) (the number of words (strings) in each file is𝑂(𝑛)). Provide a detailed worst case analysis and average case analysis of your implementation.

Worst Case:

When the hashCode(word) of each words are same.

For-loop is O(n) + Search is O(n) + Insertion is O(n) = O(n)



Average Case:

When the hashCode(word) of each words are different.

For-loop is O(n) + Search is O(1) + Insertion is O(1) = O(n)