

DS Homework 5 Report

Problem: Word Checker

In this problem I implement the dictionary using hash table, and the hash function for string I referenced from the internet; the dictionary is a class and consist of array of vector, the size I choose prime number because it will reduce the chance of collision; the reason I choose array of vector is because it can be implemented as “Chaining” to resolve collision problem; as for processing the word, I have a top level function called makeConfusionSet and it calls the function insertStr, deleteStr , substituteStr and transposeStr to generate the set for a word; first time running the code I don’t know why I keep getting wrong answer until I realized the edit distance problem Str2(Str(1)) so in each first iteration of functions, I will call again the top level function to generate word of edit distance of 2, and the result will be stored inside a set called recommendation, and afterwards print the result out.