a. The main obstacle I overcame when writing the code for this project was the details when it came to the use of C strings. I had to combine my knowledge of arrays with my knowledge of strings in order to solve the problems I came across. Not only did I have to figure out how to compare the words to each other and how that would work in the grander scheme of the code, but once I did figure out how to set it all up, I had to figure out specifically how to make the code work with C strings. This added an entirely new layer to the project that took some extra time to work through. Also, I hit a large mental block when it came to the second function, which I only was able to work through once I decided it would be easier to create a third function that I could call throughout the function.

b. editStandards:

Check if nStandards is less than 0 or if either word has no characters

Check to see if each loop has only letters

Check to see if there are any repeating standards

If standards repeat, remove the pair with the smaller distance

Move the standards that are not in standard form to the end of the array, and subtract the total number of non-standard standards from the value to return

Return the final value of standards

determineMatchLevel:

Create a new array to work with in the function

Create an array to store the next word to compare

Check if nStandards is < 0

Copy the jeet given into the new array, leaving out extraneous characters

Create a new function that puts the next word to compare into the new word array

Start a loop for the amount of nStandards

Start a loop that checks if the first word appears in the jeet

If this is the case start a loop that looks for the second word within the given distance

If this is found, increment a sum integer and move to next standard

Repeat for every set of standards, incrementing the sum

Once finished, return the sum

c. Test Cases:

Tests with extra characters

(“ %$$^76537hello I am here”)

(“The eccentric billionaire on the 21st of May went to Wal-Mart”)

(“Clyde Edwards-Helaire is a great running back”)

(“He came in 1st place”)

(“Hello- how are you doing?”)

Tests in which the words are in the jeet but not the correct distance

(word1: “hello”, “he”, “is”)

(word2: “friend”, “was”, “she”)

(distance: 1, 2, 1)

Ex:

(“hello, my friend. Was he at the game yesterday?”)

(“is he the one that was her friend”)

(“was she at the party today?”)

Tests that have multiple of the same words

(word1: “hello”, “he”, “is”)

(word2: “friend”, “was”, “she”)

(distance: 3, 4, 3)

Ex:

(“hellofriendfriendfriendhellohellofriendhellofriend”)

(“hewashehehewaswashewashewas”)

(“issheissheshesheshesheisisisissheshe”)