Lab 13 String Helper

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# Problem

This lab we must create 2 classes, one as a driver for the code with a main method that tests sub methods and then a class that has sub methods. The sub methods needed are one that checks to see if a word given has all unique characters, returning True of False. The next method is mesh strings that combine the two words together, alternating letters. The third method replaces all the Vowels with “oodle”. The final sub method calculates the weight of the word.

# Solution

In the main method, All I do is call the sub methods with different strings to use the manipulators for and tells the code to print it out. The first method is hasAllUniqueCharacters. It takes in a word and runs a for loop that counts up using I less than length. Inside that for loop is one with j, which is equal to 1 plus I, this then uses an if loop to compare the letters and if it is the same, it returns a false value. The next method is meshStrings. This takes in two strings and uses an int value that adds up the two-word lengths. Then in a for loop, from 0 to that value, it pulls the letter from the value of I in the string. However, there are if statements that will stop adding letters if the word is complete. The next one is replaceVowelsWithOodle. This runs another for loop using the word length of the string given. Then, using I it parses the character at that spot. Then using an if statement it checks if it is a vowel. If it is it adds “oodle” to the string. If not, it just adds the character. This new string is then returned. The final method is calculating the weight. Using another for loop for the length, it parses the character at each index spot. If it is a vowel it adds 2.5 to the weight. If it is not, it adds 3.4 to the weight. This value is then returned.

# Implementation Problems Encountered

There were no problems that I encountered in the code.

# Lab Report Questions

1. A static method is a method in a class, but it is not a part of the object that the class creates. It is appropriate to use a static method if you are returning a value that does not relate to the object defined by the class.
2. It is not possible for a static method to call a non-static method