ASSIGNMENT 1

MODIFICATION QUESTION - DESIGN

Input: n – the number of pairs of dancing strings, n pairs of dancing strings

Output: n lines. The i^{th} line, 1<=i<=n, consists of a string which is the result of following operations, performed in that order.

1. Flipping the case of each character in the strings in the i^{th} pair
2. Merging the strings in the i^{th} pair
3. Reversing the merged string from the above operation

Dancing-Strings( ) // Main function **1 Mark**

1. Read n
2. For each pair:
    a. Read strings str1 and str2
    b. Call Toggle-Move(str1)
    c. Call Toggle-Move(str2)
    d. result=Merger-Reverse-String(str1, str2)
    e. Return result

Toggle-Move(string str) **1.5 Marks**

1. for each character ch in str:
    a. If ch>64 and ch<91
        i. ch=ch+32
    b. else
        ii. ch=ch-32

Merger-String(string str1, string str2) **2.5 Marks**

1. Create a string str3 where length(str3)=length(str1)+length(str2)
2. Set i=length(str1), j = 1
3. While i > 0
    a. str3[j] = str1[i]
    b. Decrement i by 1, Increment j by 1
4. Set i = length(str2)
5. While i > 0
    a. str3[j]=str2[i]
    b. Decrement i by 1, Increment j by 1
6. Return str3