## DMOPC '21 Contest 9 P2 - String Puzzle

Time limit: 2.0s Memory limit: 256M

Bored after completing all of the statistics handouts for the day, you turn around to take a peek at what Christian is doing. As it turns out, he is working on a list of T string puzzles. The goal of the i-th puzzle is to transform a string of lowercase letters  $A_i$  into the string  $B_i$  using the following operation any number of times:

• Select two consecutive occurrences of the same letter and replace them with one occurrence of the next letter in the alphabet. Note that z is the last letter of the alphabet, so zz cannot be replaced.

After working on the puzzles for a few minutes, you have a strange suspicion that some of them are impossible. Thus, write a program to determine if it is possible to solve each puzzle.

#### **Constraints**

 $1 < T < 10^5$ 

 $1 \leq |A_i|, |B_i| \leq 10^6$ 

The sum of  $|A_i| + |B_i|$  over all puzzles does not exceed  $10^6$ .

 $A_i$  and  $B_i$  contain only lowercase letters.

#### **Subtask 1 [30%]**

 $A_i$  and  $B_i$  contain only  $\overline{\hspace{1pt}}$  and  $\overline{\hspace{1pt}}$   $\overline{\hspace{1pt}}$   $\overline{\hspace{1pt}}$  .

#### **Subtask 2 [70%]**

No additional constraints.

## **Input Specification**

The first line contains an integer T.

The next T lines each contain 2 space-separated strings  $A_i$  and  $B_i$ .

## **Output Specification**

For each puzzle, output YES if it is solvable or NO otherwise.

## **Sample Input**

```
3
caabdfgg efh
zz z
dmopc funcontest
```

# **Sample Output**

YES

NO

NO