Mock CCC '20 S1 - War

Time Limit: 2.0s **Memory Limit:** 64M

As a child, Larry always played War with his friends. If you are not aware, War is a card game with simple rules. This version may be different from a version you have played.

- Each player flips over the first card in their hand.
- Whichever player has the higher card takes all the cards on the table into their winnings **(not their hand)**.
- However, if both revealed cards are the same... they remain on the table.
- Repeat until either player has no cards left in their hand.
- If there are cards left on the table, they are left.
- The person with the most cards in their winnings wins, or it is a tie if they are equal.

However, Larry is a fan of violence, and doesn't particularly care who wins. Because of this, he wants to know how much war will occur in his game. Whenever the two players' cards are the same, a *battle* begins, which ends when the cards are won by someone.

Given some sequence of cards for Larry and his opponent's hands, can you tell Larry how many battles will occur?

Input Specification

The first line will contain an integer N $(1 \leq N \leq 1000)$, the number of cards in each hand.

The next line will contain N integers a_i $(1 \leq a_i \leq 11)$, the values of the cards in Larry's hand from start to end.

The final line will contain N integers b_i $(1 \leq b_i \leq 11)$, the values of the cards in Larry's opponent's hand from start to end.

Output Specification

You are to print one line, the number of battles that occurred.

Sample Input

```
5
1 1 2 4 3
1 2 2 4 1
```

Sample Output

```
2
```

Riolku's Mock CCC S1 - Word Bot

Time Limit: 2.0s **Memory Limit:** 256M

Mosey Maker is practicing how to use words!

To help him with his words, he made up a bot to recognize them. However, his bot isn't that intelligent.

His bot recognizes words as a list of alphabetic characters. Mosey Maker's bot doesn't think long sequences of vowels or consonants are valid, so if more than C consonants or V vowels are seen in a row, his bot does not consider it a word. Note that the vowels are `aeiouy`, and the consonants are `bcdfghjklmnpqrstvwxyz`. Note that `y` counts as **both** a consonant and a vowel.

Unfortunately, Mosey Maker lost his bot, and wants you to recode it.

Given a single word of N characters, is it valid?

Constraints

$1 \leq N, C, V \leq 10^5$

The word will only contain lowercase alphabetic characters.

Subtask 1 [5/15]

The letter `y` will not appear in the word.

Subtask 2 [10/15]

No additional constraints.

Input Specification

The first line will contain three integers, N, C, and V.

The next line will be the word Mosey wants you to check.

Output Specification

Output `YES` if the word is valid and `NO` otherwise.

Sample Input 1

```
12 3 3
onomatopoeia
```

Sample Output 1

```
NO
```

Explanation for Sample Output 1

Note that although it is a valid English word, `onomatopoeia` has too many trailing vowels to be a valid word.

Sample Input 2

```
8 2 4
aaybaaaa
```

Sample Output 2

```
YES
```

Sample Input 3

```
10 8 2
aayczttpqw
```

Sample Output 3

```
NO
```

Explanation for Sample Output 3

Note that since `y` is both a vowel and a consonant, `aay` is considered a string of 3 vowels.

Sample Input 4

```
5 4 4
yyyyy
```

Sample Output 4

```
NO
```