

Typo

Lili has created a program to tell whether a word is already known or not. This program will print "yes" if the word is already known or "no" if the word is new. She wants to update the program because she is clumsy and often make a typo. The new program is supposed to print "yes" if there exists a known word that is the same or just have one letter different from the typed word or else print "no". Note that Lili is clumsy and can make typos, but she will always have the correct length of the word, so "output" and "outputs" is a different word even though it only has one different letter.

Format Input

The first line will contain an integer T, the number of test cases. The next line will contain an integer N, the number of known words. The next N lines will consist of an integer denoting the length of the word, followed by a string, denoting the K-th known word. The last line of each test case will consist of an integer denoting the length of the word, followed by a string, denoting the word typed by Lili.

Format Output

For each test case, print "Case #X: " (X starts with 1) and followed by "yes" if the word Lili typed is known or "no" if it is not.

Constraints

1 <= T <= 10

1 <= N <= 100

The length of each word will not be larger than 100 and all word will be in lowercase English.

Sample Input	Sample Output
4	Case #1: yes
3	Case #2: yes
6 typing	Case #3: no
5 typos	Case #4: no
5 input	
5 onput	
1	
6 output	
6 output	
3	
6 typing	
5 input	
6 output	
6 outptu	
1	
6 output	
7 outputs	