**Problem 6: Road Rally**

**Overview**
During one form of the “sport” known as “road rallying”, car drivers are required to navigate on their own (usually no electronic aids such as GPS’s or Google Maps type apps are allowed) through a series of named checkpoints. The car log is updated whenever a checkpoint is passed even if it is not the next one or even on the list of checkpoints for this car. Drivers must pass all checkpoints in order, but it is possible that they pass extra ones (even ones on their course) on the way. For instance, while traveling from Checkpoint #2 (East-End-Pizza) to Checkpoint #3 (West-Town-Ice-Cream) a team may pass Checkpoint #8 (Center-Of-Town). Center-Of-Town must still be visited after Checkpoint #7, however. When a driver completes the course, his car log is checked to verify that the driver has indeed completed the course as required.

**Problem**
In this problem, you will first be given the list of checkpoints that must be passed, in the order that they must be passed. Checkpoints may be repeated in this list, but never consecutively. You will then be given the car logs for a series of cars. For each log, you must determine whether or not its driver has completed the course correctly. [One way to consider this is to ask the following question: “if I deleted certain checkpoints from the log without rearranging any of the remaining checkpoints, would it match the list I was first given?”]. Checkpoints may be repeated in any list, but never consecutively.

**Input**
The input to this problem consists of N+2 lines of text. The first line contains a single integer, N, representing the number of cars in the rally. Each subsequent line contains between 1 and 30 checkpoint names separated by spaces. A checkpoint name will consist entirely of letters (either upper or lower case), digits, or a hyphen (the minus character, not some fancy Unicode “dash”); checkpoint names will comprise no more than 100 characters and are case sensitive. N will be between 1 and 40 inclusive. The second line of input will be the list of required checkpoints, in the order they must be passed. The third line of the input corresponds to car #1, the fourth line to car #2, etc.

**Output**
The output will consist of N lines of text formatted as in the output, indicating, for each car, whether or not it completed the course correctly. The lines are to be in increasing order of car number and formatted as in the examples.

-over-
Example 1

Input

4
Alpha Beta Gamma
Gamma Alpha Beta
Gamma Alpha Beta Gamma Alpha Beta Gamma Alpha Beta
Delta Alpha Beta Alpha Epsilon Gamma
Theta

Output

Car #1 did NOT complete the course.
Car #2 DID complete the course.
Car #3 DID complete the course.
Car #4 did NOT complete the course.

Example 2

Input (There are only five lines of input in this example; pay no attention to the “word wrap”)

3
Start-Park East-End-Pizza West-Town-Pizza Southern-Tier
North-Pole Rest-Stop Hole-In-The-Wall Center-Of-Town Nowheres-Ville End-Of-The-Line
Start-Park East-End-Pizza Center-Of-Town West-Town-Pizza Center-Of-Town Southern-Tier Center-Of-Town North-Pole Rest-Stop Hole-In-The-Wall Center-Of-Town Nowheres-Ville Center-Of-Town End-Of-The-Line
Start-Park East-End-Pizza Center-Of-Town West-Town-Pizza Southern-Tier North-Pole Rest-Stop Hole-In-The-Wall Nowheres-Ville End-Of-The-Line
Lazy-Driver

Output

Car #1 DID complete the course.
Car #2 did NOT complete the course.
Car #3 did NOT complete the course.

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Example 3

Input

3
24 31 19 5 17
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25 26 27 28 29 30 31 32
2 4 3 1 19 5 1 7
24 1 31 1 19 1 5 17

Output

Car #1 did NOT complete the course.
Car #2 did NOT complete the course.
Car #3 DID complete the course.