Problem

In an attempt to reduce the growing population, **Archer** was asked to come up with a plan. **Archer** being as intelligent as he is, came up with the following plan:

If N children, with names $C_1, C_2, ..., C_N$, are born to parents with names A and B, and you consider C to be the concatenation of all the names of the children, i.e. $C = C_1 + C_2 + ... + C_N$ (where $+$ is concatenation operator), then C should be a substring of one of the permutations of $A + B$.

You are given the task to verify whether the names parents propose to give their children are in fact permissible by Archer's plan or not.

Input

The first line contains an integer T, the number of test cases. T test cases follow. Each test case stats with a line containing two space separated strings A and B, denoting the names of the parents. The next line contains a single integer N denoting the number of children A and B are planning to have. Following this are N lines, the i^{th} line containing C_i, the proposed name for the i^{th} child.

Output

For each test case output a single line containing YES if the names are permissible by Archer's plan, otherwise print NO.

Constraints

- $1 \leq T \leq 100$
- $1 \leq N \leq 1000$
- The lengths of all the strings including A, B, and all C_i will be in the range $[1, 40000]$, both inclusive. All these strings will contain only lowercase English letters.
- The combined lengths of all names of children will not exceed the combined length of the names of their parents.

Sample 1:

Input	Output
3 tom marvoloriddle 2 lord voldemort cheap up 1 heapcup bruce wayne 2 bat man	YES YES NO

Explanation:

Let Y denote the concatenation of names of all the children, and X denote the concatenation of the names of the parents.

Case 1: Here X = "tommarvoloriddle", and Y = "lordvoldemort". Consider Z = "iamlordvoldemort". It is not difficult to see that Z is a permutation of X and Y is a substring of Z. Hence Y is a substring of a permutation of X, so the answer is "YES".

Case 2: Here X = "cheapup", and Y = "heapcup". Since Y in itself is a permutation of X, and as every string is a substring of itself, Y is a substring of X and also a permutation of X. Hence "YES".

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