6. Shiffles

Program Name: Shiffles.java   Input File: shiffles.dat

Two words are said to be Shiffles if the letters in one word are shifted some number of letters to the right in the alphabet, then the letters either form a new word or may be rearranged to form a new word.

For example, each of the letters in the word FIB are shifted three letters to the right so F shifts to I, I shifts to L and B shifts to E. The new letters, ILE are then rearranged to form the word LIE.

You will be given two words to determine if the second word is a "shiffle" of the first word.

Input
The first line will contain a single integer n that indicates the number of lines to follow. Each of the next n lines will contain an integer m that will indicate the number of letters for the shift, a space, and then two words separated by a space.

Assumptions
Both words will consist of the same number of uppercase letters. The last m letters of the alphabet will not appear in the first word.

Output
Print YES if the second word is a "shiffle" of the first word or print NO if it is not.

Example Input File
```
3
3 FIB LIE
5 BAD FOG
7 NILE PLUS
```

Example Output to Screen
```
YES
NO
YES
```