
7. Interlocked

Program Name: Interlocked.java

Input File: interlocked.dat

Two strings are said to be "interlocked" to a third string if:

- All of the characters in the first string are contained in order, but not necessarily consecutively, in the third string.
- All of the characters in the second string are contained in order, but not necessarily consecutively, in the third string.
- Letters that appear in both words do not have to appear twice in the interlocked word.
- Letters that appear more than once in a single word must appear more than once in the interlocked word.

You are to write a program to determine if two strings are "interlocked" in a third string.

Input

The first line of input will contain a single integer n that indicates the number of data sets to follow. Each of the following n lines will contain a list of three words composed of lower case letters of the alphabet and each separated by a single space. The first two words are the words for you to determine if they are interlocked in the third string.

Output

For each set of three words you will print YES on a single line if the first two strings are interlocked in the third string and NO if they are not.

Example Input File

```
4
bit one bointe
bit one bioonaet
bit one bierontt
bit byte bieyonte
```

Example Output to Screen

```
YES
YES
NO
YES
```