

Problem F. New Year Disaster

Time limit 2000 ms

Mem limit 262144 kB

Alice made personalised Happy New Year cards to send to her friend. She cut out letters according to her friend's first and last name. Alice's mischievous brother Bob was found removing letters from the name on the card and stacking them in a pile.

Help Alice determine if it is possible for her to reconstruct her friend's name from the letters found in the pile. That is, we need to verify that there are no extra letters, and that Alice will not need to cut more letters.

You are given the first and last name of Alice's friend and also the pile of letters made by Bob.

Input

The input file consists of three lines: the first line contains the friend's first name, the second line contains the friend's last name and the third line contains letters in a pile created by Bob. All lines are not empty and contain only uppercase Latin letters. The length of each line does not exceed 100.

Output

Print "YES" without the quotes, if the letters in the pile could be permuted to make the name of Alice's friend. Otherwise, print "NO" without the quotes.

Sample 1

Input	Output
SANTACLAUS DEDMOROZ SANTAMOROZDEDCLAUS	YES

Sample 2

Input	Output
PAPAINOEL JOULUPUKKI JOULNAPAOILELUPUKKI	NO

Sample 3

Input	Output
BABBONATALE FATHERCHRISTMAS BABCHRISTMASBONATALLEFATHER	NO

Note

In the first sample the letters written in the last line can be used to write the names and there won't be any extra letters left.

In the second sample letter "P" is missing from the pile and there's an extra letter "L".

In the third sample there's an extra letter "L".