B. Letter

time limit per test
2 seconds
memory limit per test
256 megabytes
input
standard input
output
standard output

Vasya decided to write an anonymous letter cutting the letters out of a newspaper heading. He knows heading s_1 and text s_2 that he wants to send. Vasya can use every single heading letter no more than once. Vasya doesn't have to cut the spaces out of the heading — he just leaves some blank space to mark them. Help him; find out if he will manage to compose the needed text.

Input

The first line contains a newspaper heading s_1 . The second line contains the letter text s_2 . s_1 $\bowtie s_2$ are non-empty lines consisting of spaces, uppercase and lowercase Latin letters, whose lengths do not exceed 200 symbols. The uppercase and lowercase letters should be differentiated. Vasya does not cut spaces out of the heading.

Output

If Vasya can write the given anonymous letter, print YES, otherwise print NO

Examples

input

Instead of dogging Your footsteps it disappears but you dont notice anything where is your dog

output

NO

input

Instead of dogging Your footsteps it disappears but you dont notice anything Your dog is upstears

output

YES

input

Instead of dogging your footsteps it disappears but you dont notice anything Your dog is upstears

output

NO

input

abcdefg hijk

kjihgfedcba

output

YES