

No Pain No Gain!

ZPRAC-16-17-Lab6

[30 points]

Bhuvesh and Rohan are excited to have you on board! The three of you sit down and start monitoring Samik's online footprint. As luck would have it, Samik was also addicted to cricket betting! His rating system however was quite accurate, better than what Prabuddha had. But you know how Bhuvesh and Rohan are ... they decide to troll him by reducing his earnings!

After much effort, they manage to find a bug in his system - They have identified some special strings such that if a team's name can be constructed by only using letters from these strings, his system would place a bet incorrectly. For example, if the special string is ABCDDAGMICME, and a team's name is MAGICME, then it can be entirely constructed from the letters of the special string, and hence would cause Samik's system to fail. However if the team's name was ABBA, it won't be the case as there is an extra B used. Note that the team's name does not have to use all the characters of the special string.

Rohan turns to you for help. He wants to see which of the special strings is useful for to trick Samik's system into placing a wrong bet for a team.

The input consists of two lines. The first line contains the special string (composed entirely of uppercase letters). The second line contains the team name (again uppercase). Both the strings do not have spaces. First string is terminated by a "\n" and second string is terminated by EOF.

The output should consist of a single containing a "YES", if the team's name can be constructed entirely by using letters from the special string, and "NO" otherwise.

Constraints :

Length of both strings ≤ 1000000

Example

Input:

LORDYALS

ROYALS

Output:

YES

Input:
NIGHTS
KNIGHTS

Output:
NO