G. Fake News (easy)

time limit per test: 1 second memory limit per test: 256 megabytes

input: standard input output: standard output

As it's the first of April, Heidi is suspecting that the news she reads today are fake, and she does not want to look silly in front of all the contestants. She knows that a newspiece is fake if it contains heidi as a subsequence. Help Heidi assess whether the given piece is true, but please be discreet about it...

Input

The first and only line of input contains a single nonempty string s of length at most 1000 composed of lowercase letters (a-z).

Output

Output YES if the string s contains heidi as a subsequence and NO otherwise.

Examples

input	
abcheaibcdi	
output	
YES	

ınput

hiedi

output

NO

Note

A string s contains another string p as a <u>subsequence</u> if it is possible to delete some characters from s and obtain p.