
Problem A. Pursuing the Happiness

Input file: **standard input**
Output file: **standard output**
Time limit: **2 seconds**
Memory limit: **256 megabytes**

Mike wants to find a substring «**happiness**» in the string s , but Constantine cannot allow this and decided to hinder him. He is planning to swap two characters on two different positions in the string s so that Mike wouldn't be able to find what he looks for. Which two characters Constantine should swap?

Input

The only line contains from 2 to $2 \cdot 10^5$ lowercase Latin letters — the string s , in which Mike wants to find a substring «**happiness**».

Output

If Constantine succeeds in achieving his goal, in the first line output «**YES**» without quotes. In the second line output two distinct integers separated by a space — the positions of characters in the string s , which Constantine should swap. Positions in the string are numbered from one. If there are several possible answers, output any of them.

If for any choice of Constantine Mike still would be able to find a substring «**happiness**», in the only line output «**NO**» without quotes.

Examples

standard input
pursuingthehappiness
standard output
YES 15 18

standard input
happinessformehappinessforyouhappinessforeverybodyfreeandletnoonebeleftbehind
standard output
NO