Letters on T-shirts (L)

Memory limit: 1024 MB   Time limit: 1.00 s

This year's edition of *CERC* is the first in history to host a team of dwarves. The dwarves have been practicing problem solving for a very long time, and they are determined to do their best at the contest. Before the contest ends, they want to make sure they return home with a meaningful souvenir to commemorate this wonderful event. They have decided to take a photo of themselves at their team station while making a successful submission. They have prepared a solution to submit and found a volunteer to take the photo. Now they need to decide in what order they will appear in the photo.

Each of the three dwarves has some letters written on their T-shirt, and they realized it would be hilarious if the combined strings on their T-shirts spelled the string `cerc` in the photo. The string may be formed by just part of the team: the dwarves whose T-shirts won't participate in forming the `cerc` string will step aside for this photo and pose for later photos.

Help the dwarves decide which of them, and in what order, should pose for the photo. The combined strings from their T-shirts must form the string `cerc` exactly, not just contain it as a substring.

Input

The input consists of three lines. The i-th line contains the contents of the i-th dwarf's T-shirt.

Output

If the team cannot form the `cerc` string in the photo, output a single line with the word `NO`.
Otherwise output three lines:

- In the first line output `YES`.
- In the second line output the number of dwarves that will form the `cerc` string.
- In the third line output the indices of these dwarves in the order they should appear in the photo.

If there are many solutions, output any of them.

Limits

Every string in the input is lowercase over the Latin alphabet and has length between 1 and 5.

Examples

Input	Output
abc	YES
rc	2
ce	3 2

Input	Output
cer	NO
cr	
icpc	