Problem E. Espumoso

Input file:	*standard input*
Output file:	*standard output*
Time limit:	5 seconds
Memory limit:	256 mebibytes

You are given two different strings a and b of the same length. You are asked to check if there is some substring s of string a such that after cyclic rotation of s in its place, string a could become equal to string b.

A cyclic rotation of string $s_1 s_2 \dots s_n$ with shift i is a string of the form $s_{n-i+1} s_{n-i+2} \dots s_n s_1 s_2 \dots s_{n-i}$.

Input

The first line contains string a which consists of lowercase Latin letters.

The second line contains string b which also consists of lowercase Latin letters.

Both strings have the same length not exceeding $5 \cdot 10^5$ and not less than 2.

Output

On the first line, print "YES" or "NO".

If you printed "YES", then in the second line, print three integer numbers: l, the index of the beginning of substring (1-indexed), len, the length of substring, and num, the shift of rotation ($1 \le num \le len - 1$).

If there are multiple solutions, output any one of them which satisfies these constraints.

Examples

standard input	standard output
abacaba aaaabbc	NO
abca acba	YES 2 2 1