

Davy Jones's Organ

Two melodies don't go out of Davy Jones's head. One of them or another sometimes emerge in his mind. To get rid of annoying melodies, Davy Jones decided to play them on his organ. At first, he wants consequently perform first and second melodies. And then Davy Jones is going to play the same notes as the first time but in the reverse order.

If the first and second compositions sound exactly the same, then, according to Davy Jones's idea, the melodies will no longer vary by his subconscious and finally will leave him alone.

Jones recorded the notes of both songs. He was sure in the song's duration, but not really in which place every song begins. But it is not important, because they play cyclically in his mind and you can choose any place as a start in each of them.

Input

In the first line of the input you are given a string of length n — sequence of notes of the first melody. In the second line there is a string of length m — sequence of notes of the second melody ($1 \leq m < n \leq 5 \cdot 10^4$, $m \leq n$). Each note is represented by lowercase Latin letter. Order of notes in the melody corresponds to their order in its playback accurate within start of the melody.

Output

If it is impossible to play compositions conceived by Davy Jones's way, output "No". Otherwise, in the first line write "Yes" and in the second — a pair of integers — numbers of notes in the first and second tunes respectively, which you should choose as a start. Numbering of notes corresponds to a record of melodies in the input and starts from one. If there are several possible solutions choose the one with the smallest possible tune index from the first note. If there are still many solutions print any.

Example

Input:

cdedab

bac

Output:

Yes

5 3

Input:

aaaa

bbb

Output:

No