Problem C
Saraga

The word *saraga* is an abbreviation of *sarana olahraga*, an Indonesian term for a sports facility. It is created by taking the prefix `sara` of the word `sarana` and the suffix `ga` of the word `olahraga`. Interestingly, it can also be created by the prefix `sa` of the word `sarana` and the suffix `raga` of the word `olahraga`.

An abbreviation of two strings S and T is *interesting* if there are at least two different ways to split the abbreviation into two **non-empty** substrings such that the first substring is a prefix of S and the second substring is a suffix of T.

You are given two strings S and T. You want to create an interesting abbreviation of strings S and T with minimum length, or determine if it is impossible to create an interesting abbreviation.

Input

The first line consists of a string S ($1 \leq |S| \leq 200\,000$).

The second line consists of a string T ($1 \leq |T| \leq 200\,000$).

Both strings S and T only consist of lowercase English letters.

Output

If it is impossible to create an interesting abbreviation, output `-1`.

Otherwise, output a string in a single line representing an interesting abbreviation of strings S and T with minimum length. If there are multiple solutions, output any of them.

Sample Input #1

```
sarana
olahraga
```

Sample Output #1

```
saga
```

Explanation for the sample input/output #1

You can split `saga` into `s` and `aga`, or `sa` and `ga`. The abbreviation `saraga` is interesting, but `saga` has a smaller length.

Sample Input #2

```
berhiber
wortelhijau
```

Sample Output #2

```
berhijau
```

Explanation for the sample input/output #2

The abbreviation `belhijau` is also interesting with minimum length, so it is another valid solution.

Sample Input #3

```
icpc
icpc
```

Sample Output #3

```
icpc
```

Sample Input #4

```
icpc
jakarta
```

Sample Output #4

```
-1
```