

## 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

```
berhi jau
```

*Explanation for the sample input/output #2*

The abbreviation belhi jau 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
```