LCS

Problem Statement

You are given strings s and t. Find one longest string that is a subsequence of both s and t.

Notes

A *subsequence* of a string x is the string obtained by removing zero or more characters from x and concatenating the remaining characters without changing the order.

Constraints

- s and t are strings consisting of lowercase English letters.
- $1 \leq |s|, |t| \leq 3000$

Input

Input is given from Standard Input in the following format:

s
t

Output

Print one longest string that is a subsequence of both s and t. If there are multiple such strings, any of them will be accepted.

Sample Input 1 Copy

Copy
```
axyb
abyxb
```

Sample Output 1 Copy

Copy
```
axb
```

The answer is `axb` or `ayb`; either will be accepted.

Sample Input 2 Copy

```
aa
xayaz
```

Sample Output 2 Copy

```
aa
```

Sample Input 3 Copy

```
a
z
```

Sample Output 3 Copy

```

```

The answer is (an empty string).

Sample Input 4 Copy

```
abracadabra
avadakedavra
```

Sample Output 4 Copy

```
aaadara
```