Educational DP Contest AtCoder F - LCS

Time limit: 1.0s **Memory limit:** 1G

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 Specification

The first line of input will contain a string s.

The second line of input will contain a string t.

Output Specification

You are to print out, on a single line, 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

```
axyb
abyxb
```

Sample Output 1

```
axb
```

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

Sample Input 2

```
aa
xayaz
```

Sample Output 2

```
aa
```

Sample Input 3

```
a
z
```

Sample Output 3

```

```

The answer is (an empty string).

Sample Input 4

```
abracadabra
avadakedavra
```

Sample Output 4

```
aaadara
```