
Alphabetically smallest word

P84412_en

Tretzè Concurs de Programació de la UPC - Semifinal (2015-07-01)

Given a string s made up of only lowercase letters, and a natural number k , remove any substring of length k from s so that the result is the lexicographically smallest possible word.

Input

Input consists of several cases, each with s and k . Assume $1 \leq k < |s| \leq 10^4$.

Output

For every case, print the alphabetically smallest word that can be obtained after removing k consecutive letters from s .

Sample input

```
abba 1
abba 2
abba 3
zxazyzy 3
```

Sample output

```
aba
aa
a
zxay
```

Problem information

Author : Salvador Roura

Generation : 2015-07-02 18:51:00

© Jutge.org, 2006–2015.

<http://www.jutge.org>