Problem C. C- frequency array

Time limit 2000 ms Mem limit 262144 kB

Problem Statement

You are given a string S consisting of lowercase English letters. Find the lexicographically (alphabetically) smallest lowercase English letter that does not occur in S. If every lowercase English letter occurs in S, print None instead.

Constraints

- $1 \le |S| \le 10^5$ (|S| is the length of string S.)
- *S* consists of lowercase English letters.

Input

Input is given from Standard Input in the following format:

S

Output

Print the lexicographically smallest lowercase English letter that does not occur in S. If every lowercase English letter occurs in S, print None instead.

Sample 1

Input	Output
atcoderregularcontest	b

The string atcoderregular contest contains a, but does not contain b.

Sample 2

Input	Output
abcdefghijklmnopqrstuvwxyz	None

This string contains every lowercase English letter.

Sample 3

Input	Output
fajsonlslfepbjtsaayxbymeskptcumtwrmkkinjxnnucagfrg	d