

# Yo Yo Jagdish Singh

Like many teenagers of his age, Jagdish is into Honey Singh these days, and has decided to enter a rapping contest. A rap song can be represented as a single word of uppercase characters (A-Z). The contest assigns score based on the smallest length word which is not a substring of the song. The participant with the highest score gets a chance to meet with Honey Singh.

Jagdish is pumped up about this, and starts writing his song. He asks Anandi for help. Anandi being a Heavy Metal fan, dislikes the whole idea. However, she ends up helping Jagdish by evaluating his songs by finding a string (containing uppercase letters) with smallest length which is not a substring of the song. If multiple strings of same lengths are present, the lexicographically smallest one is considered as the result. Help Anandi find such string.

## Input

Each line represents an input, consisting of a string (made up of uppercase characters A-Z).  
Read till EOF

## Output

For each input, output the result string.

## Constraints

There will be 100 test cases.

$1 \leq \text{Length of input string} \leq 10^4$

## Sample Input

ABCD  
BBB

## Sample Output

E  
A