

## Problem D. Dynamic Input Tool

Input file: *standard input*  
Output file: *standard output*  
Time limit: 1 second  
Memory limit: 512 mebibytes

CodingSlave 1.0 is a brand new text editor. There are two possible operations to compose a string in CodingSlave 1.0:

1. Add one character at the end of the current string.
2. Choose a nonempty subsequence of the current string and add it at the end of the current string.

Initially, the current string is empty.

Given a word consisting of lowercase English letters, calculate the minimum number of operations needed to compose this string.

### Input

The first line contains a string  $S$  consisting of lowercase English letters ( $1 \leq |S| \leq 10^6$ ).

### Output

Print one integer: the minimum number of operations needed to compose  $S$  using CodingSlave 1.0.

### Examples

<i>standard input</i>	<i>standard output</i>
aaa	3
aabaaaabaa	5