

Problem D. Longest Repeated Substring

Time limit 2000 ms

Mem limit 262144 kB

You're given a string of lower-case Latin letters. Your task is to find the length of its longest substring that can be met in the string at least twice. These occurrences can overlap (see sample test 2).

Input

The first input line contains the string. It's guaranteed, that the string is non-empty, consists of lower-case Latin letters, and its length doesn't exceed 100.

Output

Output one number — length of the longest substring that can be met in the string at least twice.

Sample 1

Input	Output
abcd	0

Sample 2

Input	Output
ababa	3

Sample 3

Input	Output
zzz	2