

Problem A. Letters

Input file: standard input
Output file: standard output
Time limit: 2 seconds
Memory limit: 64 megabytes

Given text. Find how many words started by letters: 'a', 'b', 'c' ... 'z'. Note: 'a' and 'A' must be considered as same letters.

Input

Text.

Output

26 lines with numbers.

Example

standard input	standard output
Machine code was the language of	0
early programs, written in the	1
instruction set of the particular	1
machine, often in binary notation.	0
	1
	0
	0
	0
	3
	0
	0
	1
	2
	1
	3
	2
	0
	0
	1
	3
	0
	0
	2
	0
	0
	0

Problem B. !Prime

Input file: **standard input**
Output file: **standard output**
Time limit: **2 seconds**
Memory limit: **64 megabytes**

Given a list of numbers. Print all not prime numbers which is appeared in the list more than once in ascending order.

Input

List of numbers.

Output

List of numbers.

Example

standard input	standard output
1 2 3 4 5 6 6 7 8 2 3 3 4 5 6 7	4 6

Problem C. Palindrom

Input file: `standard input`
Output file: `standard output`
Time limit: 2 seconds
Memory limit: 64 megabytes

You are given a string. Identify, wheather it is a palindrom or not. Palindrom is word that can be read from left to right the same as from right to left.

Input

Input contains single string, without any spaces.

Output

Output YES if given string is palindrom or NO otherwise.

Example

standard input	standard output
aba	YES

Note

Please, solve this task with recursion.

Problem D. Password

Input file: **standard input**
Output file: **standard output**
Time limit: **2 seconds**
Memory limit: **64 megabytes**

Given password. Check if this password is good. String is good when it meets next conditions: a) the length is no more 10 chars b) string has at the least 3 digits c) string is not palindrome.

Input

One string.

Output

"YES" or "NO"

Examples

standard input	standard output
xupu9fs7	NO
tuc1c6sn26	YES

Problem E. Set

Input file: **standard input**
Output file: **standard output**
Time limit: 2 seconds
Memory limit: 64 megabytes

Given list of words. Each word contains only letters from 'a' to 'z'. Erase all palindromes and duplicates from text. Print words from text in ascending order in separate lines.

Input

List of words.

Output

List of words.

Examples

standard input	standard output
a abc aba bbbc dcd asfd	abc asfd bbbc
abba aba aa word	word

Problem F. Zipping

Input file: `standard input`
Output file: `standard output`
Time limit: 2 seconds
Memory limit: 64 megabytes

Given a list of numbers. Move all zeros to the end. Other non-zero numbers should be placed as in origin order. Print modified list.

Input

List of numbers

Output

List of numbers

Example

standard input	standard output
4 0 5 0 3 0 0 5	4 5 3 5 0 0 0 0