

HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

STEP 1 STEP 2 STEP 3 STEP 4 STEP 5 | THEORY PRACTICE | SUBMIT SUBMISSIONS HACKS STANDINGS CUSTOM INVOCATION ITMO Academy: pilot course » Suffix Array » Step 3 » Practice

## A. Substring Search

time limit per test: 2 seconds<sup>1</sup> memory limit per test: 512 megabytes

Implement the algorithm that was discussed in the lecture.

Given a string t and n queries, each query is a string  $s_i$ . For each request you need to determine whether the string  $s_i$  occurs as a substring in t.

## Input

The first line of input contains the string t ( $1 \le |t| \le 300,000$ ).

The second line contains an integer n, the number of queries ( $1 \le n \le 300,000$ ). The following n lines contain one non-empty line  $s_i$  each. The sum of the lengths of all strings  $s_i$  does not exceed 300,000.

All strings consist of lowercase English letters.

## Output

For each request print "Yes" if the string  $s_i$  occurs in t, and "No" otherwise.

## Examples

Examples	
input	Сору
ababba	
3	
ba	
baba	
abba	
output	Сору
Yes	
No	
Yes	
input	Сору
codeforces	
3	
code	
forces	
math	
output	Сору
Yes	
Yes	
No	
input	Сору
a	
2	
a	
a	
output	Сору
Yes	
Yes	

<u>Codeforces</u> (c) Copyright 2010-2024 Mike Mirzayanov The only programming contests Web 2.0 platform Server time: Aug/01/2024 23:05:53 (j3). Desktop version, switch to <u>mobile version</u>. <u>Privacy Policy</u>

Supported by



