

# Aho-Corasick algorithm

Cost: 12 | Solved: 24

Memory	limit:	256	MBs
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Time limit: 1 s

Input: standard input

**Output:** standard output

#### Task:

You have to write the implementation of Aho–Corasick algorithm that finds a certain substring in a string.

## Input:

The first line contains a string **s**.

The second line contains a natural *m* - the number of substrings.

Each of the next m lines contains a substring that is needed to be found in the string s.

## **Output:**

For each substring (one per line), output *all the indexes* of a subtring's appearance in the string  $\mathbf{s}$  in ascending order.

#### **Example:**

Input	Output	·

abcdefa	
3	3
cde	4
de	17
a	