HUSTack   VIE

Problem: Week 4 - Store & Search String

Description

A database contains a sequence of key k1, k2, ..., kn which are strings (1<=n<=100000). Perform a sequence of actions of two kinds:

· find k: find and return 1 if k exists in the datab[ ]and return 0, otherwise

· insert k: insert a key k into the database and return 1 if the insertion is successful (k does not exist in the database) and return 0 if the insertion is failed (k exists in the database)

Note that the length of any key is greater than 0 and less than or equal to 50.

Input

Two blocks of information. The first block contains a key of (k1,k2,...,kn) in each line. The first block is terminated with a line containing *. The second block is a sequence of actions of two finds described above: each line contains 2 string: cmd and k in which cmd = find or insert and k is the key (parameter of the action). The second block is terminated with a line containing ***. Note that the number of actions can be up to 100000.

Output

Each line contains the result (0 or 1) of the corresponding action.

Example

Input

computer

university

school

technology

phone

*

find school

find book

insert book

find algorithm

find book

insert book

***

Output

1

0

1

0

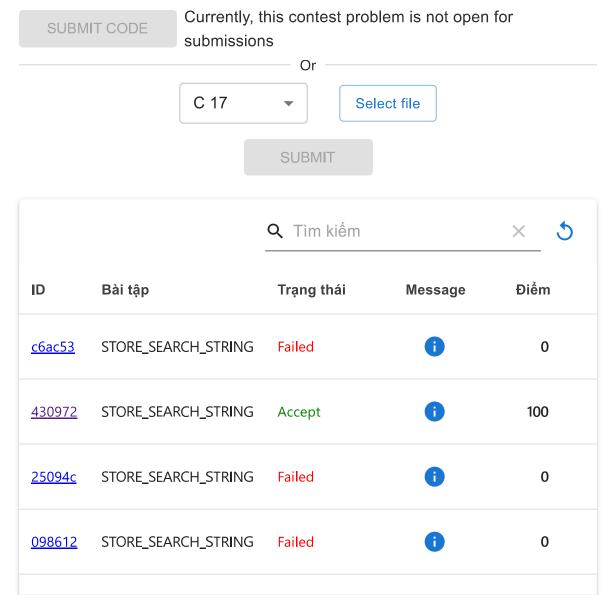1

0

Sample TestCase

C 17

| 1 | Write your Source code here |

Source code

C 17 ▼

```c
1  //C
2  #include <stdio.h>
3
4  int main()
5  {
6
7  }
```

SUBMIT CODE   Currently, this contest problem is not open for submissions

─────── Or ───────

C 17   ▼   Select file

SUBMIT

ID	Bài tập	Trạng thái	Message	Điểm
c6ac53	STORE_SEARCH_STRING	Failed	ℹ	0
430972	STORE_SEARCH_STRING	Accept	ℹ	100
25094c	STORE_SEARCH_STRING	Failed	ℹ	0
098612	STORE_SEARCH_STRING	Failed	ℹ	0

ID	Bài tập	Trạng thái	Message	Điểm

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