Dictionary

Time Limit: 2 sec, Memory Limit: 131072 KB

Search III

Your task is to write a program of a simple *dictionary* which implements the following instructions:

- insert str: insert a string str in to the dictionary
- find str: if the distionary contains str, then print 'yes', otherwise print 'no'

Input

In the first line n, the number of instructions is given. In the following n lines, n instructions are given in the above mentioned format.

Output

Print yes or no for each find instruction in a line.

Constraints

- A string consists of 'A', 'C', 'G', or 'T'
- 1 ≤ length of a string ≤ 12
- *n* ≤ 1000000

Sample Input 1

```
insert A
insert T
insert C
find G
find A
```

Sample Output 1

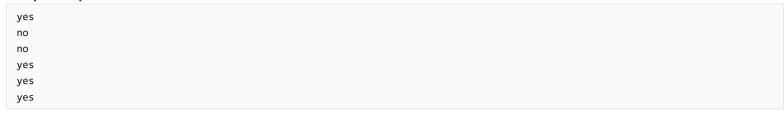
no yes

Sample Input 2

find T

```
insert AAA
insert AGC
insert AGG
insert TTT
find AAA
find CCC
find CCC
insert CCC
find CCC
find TTT
```

Sample Output 2



Notes

Template in C

Source: https://onlinejudge.u-aizu.ac.jp/problems/ALDS1_4_C