In this challenge, the task is to debug the existing code to successfully execute all provided test files.

A number is called a *smart* number if it has an odd number of factors. Given some numbers, find whether they are smart numbers or not.

Debug the given function is_smart_number to correctly check if a given number is a smart number.

Note: You can modify only *one* line in the given code and you cannot add or remove any new lines.

To restore the original code in the editor, create a new buffer by clicking on the top left icon in the editor.

Input Format

The first line of the input contains t, the number of test cases. The next t lines contain one integer each.

Constraints

- $1 \leq t \leq 10^3$ $1 \leq n_i \leq 10^4$, where n_i is the i^{th} integer.

Output Format

The output should consist of t lines. In the i^{th} line print YES if the i^{th} integer has an odd number of factors, else print *NO*.

Sample Input

4

1 2

169

Sample Output

YES

NO

N0 YES

Explanation

The factors of 1 are just 1 itself. So the answer is YES. The factors of 2 are 1 and 2. It has even number of factors. The answer is NO. The factors of 7 are 1 and 7. It has even number of factors. The answer is NO. The factors of 169 are 1,13 and 169. It has odd number of factors. The answer is YES.