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, click on the icon to the right of the language selector.

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
7
169
```

Sample Output

```
YES
NO
NO
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.

Change Theme Language Python 3

```python
import math

def is_smart_number(num):
    # Logic:
    # if a number divided by it's square root equals the square root of that number
    # that number has odd number of factors
    val = int(math.sqrt(num))

    if num / val == val:
        return True

        return False

# getting the input and running the above function
for _ in range(int(input())):
```

Line: 14 Col: 51

Upload Code as File Test against custom input Run Code Submit Code

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 3

Test case 4

Compiler Message

Success