**The King's Puzzle: The Search for the Perfect Sum**

time limit per test : 1 second

memory limit per test : 256 megabytes

In the kingdom of Numerica, King Tony, known for his love of numbers, presented a challenge to his subjects. The challenge was simple yet intriguing:

Given the number **N**," the King declared, "I want to know if a sequence of the first **N** consecutive numbers, starting from 1, whose sum is exactly **N, exists**. For example, if **N** is 6, the sum of the first 3 numbers (1 + 2 + 3) equals 6, so the answer is **YES**. But what about other numbers? Can you determine whether such a sequence exists for any **N**?

The task was clear: find out if there is a sequence of consecutive numbers starting from 1 that sums up to **N**. If such a sequence exists, the answer is **YES**; if not, it's **NO**. The King awaited the solution, knowing that those who succeeded would gain his favor and admiration.

Will you take on the King's puzzle and find the answer?

**Input Format**

The first line contains the number of test cases.

Each test case contains a number (1 ).

**Output Format**

output “yes” if exists else “no” case sensitive without quotes

**Sample 1:**

|  |  |
| --- | --- |
| **Input** | **output** |
| 2  6  7 | yes  no |