Missing

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

*F*or a long time, *Mazen* did not meet his friend *Mahmoud*, so he decided to visit him at the same time that *Mahmoud* decided to visit *Mazen*.

Mazen and *Mahmoud* are living in square grid consisting of $n \times n$ with rows and columns numbered from 1 to n, *Mazen* is living in cell $(1, 1)$ and *Mahmoud* is living in cell (n, n).

So in each move:

- *Mazen* can go *Down* and then *Right*.
- *Mahmoud* can go Up and then $Left$.

You need to determine whether they will meet each other in any cell.

Input

The first line contains t $(1 \leq t \leq 1000)$ – t donates numbers of test cases.

Each line contains n $(2 \leq n \leq 10^3)$ – n is the dimension of the grid.

Output

In each test case if *Mazen* will meet *Mahmoud* print **"YES"** or he will not find him print **"NO"**.

The strings **"yEs", "yes", "Yes" and "YES" will be recognized as a positive answer.**

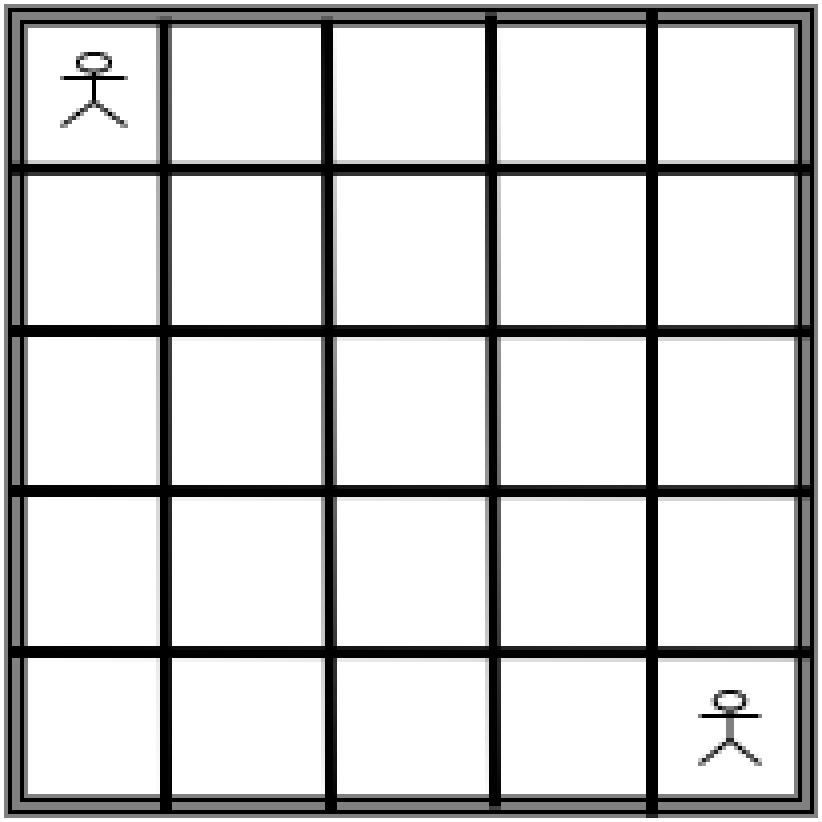
Example

standard input	standard output
2 4 5	NO YES

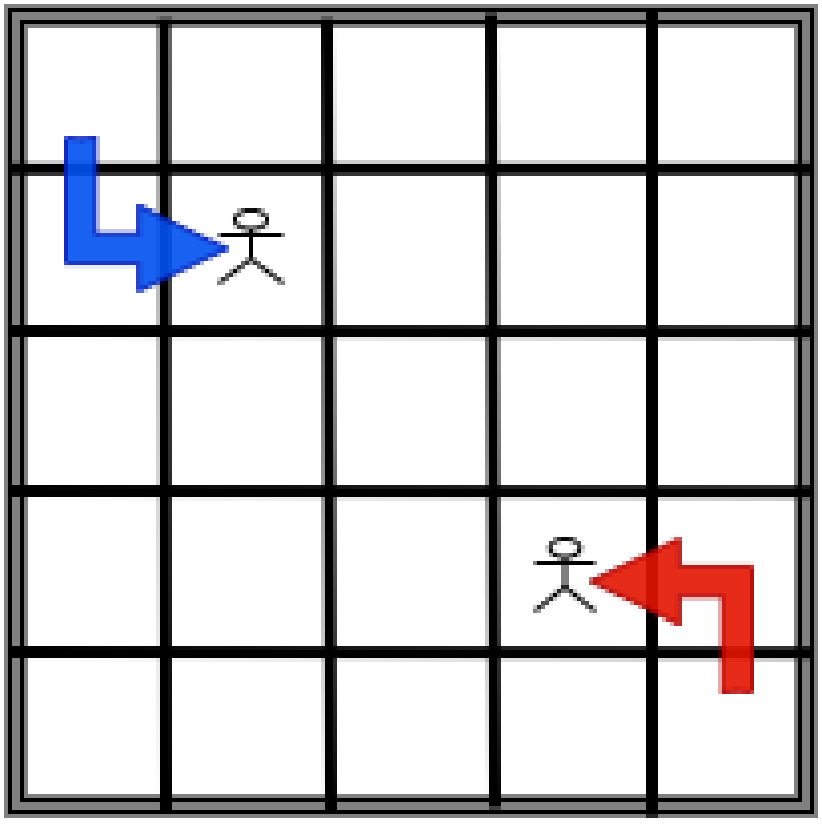
Note

For $N = 5$:

1- Initially *Mazen* and *Mahmoud* place.



2- After $first$ **move**:



3- Afer $Second$ **move** $Mazen$ **and** $Mahmoud$ **will be at the same cell:**