

# Power of 2

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[English version](#)

Your task is to print whether given number **n** is a power of 2 or not.

## Input

The first line of the standard input contains one integer **t** ( $t < 10001$ ) which is the number of test cases.

In each of the next **t** lines there is an integer **n** ( $0 < n \leq 2 \cdot 10^9$ ).

## Output

Print *YES* if number **n** is a power of 2 or *NO* if it is not.

## Example

**Input:**

4  
1  
2  
3  
4

**Output:**

YES  
YES  
NO  
YES