

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

### D. Odd Divisor

time limit per test: 2 seconds  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

You are given an integer  $n$ . Check if  $n$  has an **odd** divisor, greater than one (does there exist such a number  $x$  ( $x > 1$ ) that  $n$  is divisible by  $x$  and  $x$  is odd).

For example, if  $n = 6$ , then there is  $x = 3$ . If  $n = 4$ , then such a number does not exist.

#### Input

The first line contains one integer  $t$  ( $1 \leq t \leq 10^4$ ) — the number of test cases. Then  $t$  test cases follow.

Each test case contains one integer  $n$  ( $2 \leq n \leq 10^{14}$ ).

Please note, that the input for some test cases won't fit into 32-bit integer type, so you should use at least 64-bit integer type in your programming language.

#### Output

For each test case, output on a separate line:

- "YES" if  $n$  has an **odd** divisor, greater than one;
- "NO" otherwise.

You can output "YES" and "NO" in any case (for example, the strings yEs, yes, Yes and YES will be recognized as positive).

#### Example


input	Copy
6 2 3 4 5 998244353 1099511627776	
output	Copy
NO YES NO YES YES NO	

**ICPC Assiut Advanced Newcomers 2023**

Private

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→ **Group Contests** 

- ICPC Assiut Advanced Newcomers 2023 Contest 5
- ICPC Assiut Advanced Newcomers 2023 Contest 4
- ICPC Assiut Advanced Newcomers 2023 Contest 3
- ICPC Assiut Advanced Newcomers Practice #1
- ICPC Assiut Advanced Newcomers 2023 Contest 2
- ICPC Assiut Advanced Newcomers 2023 Onsite Contest 2
- ICPC Assiut Advanced Newcomers 2023 Contest 1
- ICPC Assiut Advanced Newcomers 2023 Onsite Contest 1

**ICPC Assiut Advanced Newcomers 2023 Contest 4**

Finished

Practice



→ **Virtual participation** 

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ **Submit?**

Language: GNU G++20 11.2.0 (64 bit, w

Choose file: Choose File No file chosen

Submit

→ **Last submissions**

Submission	Time	Verdict
<a href="#">227532146</a>	Oct/10/2023 15:17	Accepted
<a href="#">227530622</a>	Oct/10/2023 15:07	Accepted