**Power of 2**

[bit](http://practice.geeksforgeeks.org/tag-page.php?tag=bit&isCmp=0)[maths](http://practice.geeksforgeeks.org/tag-page.php?tag=maths&isCmp=0)

Given a positive integer N , check if N is a power of 2.

**Input:**  
The first line contains 'T' denoting the number of testcases. Then follows description of testcases.  
Each testcase contains a single positive integer N.

**Output:**  
Print "YES" if it is a power of 2 else "NO". (Without the double quotes)

**Constraints:**  
1<=T<=100  
1<=N<=10^18  
  
**Example:**  
Input :  
2  
1  
98  
  
Output :  
YES  
​NO

Explaination:  (2^0 == 1)

\*\*For More Examples Use Expected Output\*\*

<http://practice.geeksforgeeks.org/problem-page.php?level=-1&pid=246>

#include <iostream>

#include <stdio.h>

#define ll long long int

using namespace std;

string isPower(ll n) {

if(n == 1 || n == 2) return "YES";

ll prod= 1;

while(prod < n) {

prod \*= 2;

if(prod == n) {

return "YES";

}

}

return "NO";

}

int main() {

int t;

scanf("%d", &t);

while(t--) {

ll N;

scanf("%lld", &N);

cout << isPower(N) << endl;

}

return 0;

}