

2420 - Binary Palindrome

Description

Given a number between 0 and 2^{30} both inclusive, determine if the number is a palindrome in its binary representation.

Input specification

A number T where $0 < T < 600$, representing the amount of numbers to test. Each of the next T lines contains a number N, where $0 \leq N \leq 1073741823$.

Output specification

If N is a binary palindrome, print "YES" without quotes. If it is not, print "NO" without quotes.

Sample input

```
3
1754
1755
1756
```

Sample output

```
NO
YES
NO
```

Hint(s)

Source	Jorge Amado Soria
Added by	ymondelo20
Addition date	2013-05-19
Time limit (ms)	10000
Test limit (ms)	4000
Memory limit (kb)	256000