2939 - Back with Pandigital Numbers

Description

A base-10 integer is said to be pandigital if it contains, among its significant digits, each digit from 0 to 9 at least once. The number 1023456789 is thus the smallest base-10 pandigital number. You can easily generalize the description of pandigital numbers to any base. For example, 1032 is a pandigital number in base-4 while 1023456789ABCDEF is a pandigital number in base-16.

Alice has a special love for base-2. You will be given a list of integers in base-10. Your task here is to write a program that correctly classifies each integer of the list as being either base-2 pandigital or not.

Input specification

The first line of input contains T (T <= 200), the number of test cases. T lines follow. Each test case consists of a single line containing an integer in base-10 Ni (1 <= Ni <= 10^10000).

Output specification

For each test case, output "YES" if the i-th integer is a base-2 pandigital number or "NO" if it is not. In either case, do not include quotes in your output.

Sample input

```
2
1
2
```

Sample output

```
NO
YES
```

Hint(s)

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Added by	**ymondelo20**
Addition date	2014-06-09
Time limit (ms)	2500
Test limit (ms)	2500
Memory limit (kb)	256000
Output limit (mb)	64
Size limit (bytes)	15000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text