



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

# D. Product of Binary Decimals

time limit per test: 3 seconds memory limit per test: 256 megabytes input: standard input output: standard output

Let's call a number a *binary decimal* if it is a positive integer and all digits in its decimal notation are either 0 or 1. For example,  $1\,010\,111$  is a binary decimal, while  $10\,201$  and  $787\,788$  are not.

Given a number n, you are asked whether or not it is possible to represent n as a product of some (not necessarily distinct) binary decimals.

#### Input

The first line contains a single integer t ( $1 \le t \le 5 \cdot 10^4$ ) — the number of test cases.

The only line of each test case contains a single integer n ( $1 \le n \le 10^5$ ).

#### Output

For each test case, output "YES" (without quotes) if n can be represented as a product of binary decimals, and "NO" (without quotes) otherwise.

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

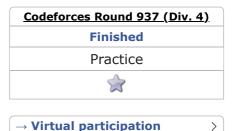
### Example



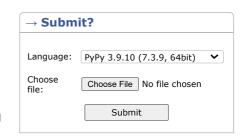
## Note

The first five test cases can be represented as a product of binary decimals as follows:

- $121 = 11 \times 11$ .
- ullet 1=1 is already a binary decimal.
- $14641 = 11 \times 11 \times 11 \times 11$ .
- $12221 = 11 \times 11 \times 101$ .
- +  $10\,110=10\,110$  is already a binary decimal.







→ Last submissions		
Submission	Time	Verdict
253799878	Mar/28/2024 19:27	Accepted
<u>253762791</u>	Mar/28/2024 18:49	Wrong answer on test 2





3/29/24, 8:38 PM Problem - D - Codeforces

Codeforces (c) Copyright 2010-2024 Mike Mirzayanov The only programming contests Web 2.0 platform Server time: Mar/29/2024 20:38:51<sup>UTC+5.5</sup> (l1).

Desktop version, switch to mobile version.

Privacy Policy

Supported by



