



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP 0

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

# C. Hexadecimal's Numbers

time limit per test: 1 second memory limit per test: 64 megabytes

One beautiful July morning a terrible thing happened in Mainframe: a mean virus Megabyte somehow got access to the memory of his not less mean sister Hexadecimal. He loaded there a huge amount of n different natural numbers from 1 to n to obtain total control over her energy.

But his plan failed. The reason for this was very simple: Hexadecimal didn't perceive any information, apart from numbers written in binary format. This means that if a number in a decimal representation contained characters apart from 0 and 1, it was not stored in the memory. Now Megabyte wants to know, how many numbers were loaded successfully.

Input data contains the only number n ( $1 \le n \le 10^9$ ).

#### Output

Output the only number — answer to the problem.

### **Examples**

| input  | Сору |
|--------|------|
| 10     |      |
| output | Сору |
| 2      |      |

### Note

For n = 10 the answer includes numbers 1 and 10.

#### → Attention

The package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, a solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then the value 800 ms will be displayed and used to determine the verdict.

## Codeforces Beta Round 9 (Div. 2 Only)

## **Finished**

Practice



## → Virtual participation

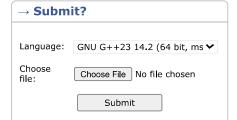
Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you solve these problems in the archive. If you just want to solve some problem from a 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

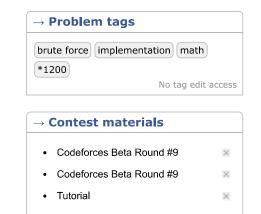
# → Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest



| → Last submissions |                      |          |
|--------------------|----------------------|----------|
| Submission         | Time                 | Verdict  |
| 325141583          | Jun/19/2025<br>14:46 | Accepted |



Codeforces (c) Copyright 2010-2025 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Jun/19/2025 18:47:14<sup>UTC+7</sup> (k1).
Desktop version, switch to mobile version.
Privacy Policy | Terms and Conditions

Supported by



