



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

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

# B. The Pharaohs

time limit per test: 2 seconds<sup>1</sup> memory limit per test: 256 megabytes

The Pharaohs of ancient Egypt were known for their brilliance in Mathematics.

The Great Pyramids are one of the amazing masterpieces that were made by them. Since the Pyramid is very Huge, they numbered each block sequentially from the top to the bottom starting from number 1. Such that the first top row contains One block, the second contains Two blocks, the third Three blocks and so on . . . In general each row i contains i blocks.

If you gave them a certain block number N they could tell you on which row of the pyramid it lies on.

So your great ancestors are wondering are you smart enough to figure out the answer?

#### Input

The first line of input contains several test cases T ( $1 \le T \le 10^5$ ).

For each test case, there is a single integer N ( $1 \le N \le 10^{18}$ ), indicating the given block number.

#### Output

For each test case print the row number which the block lies on.

#### **Example**

input	Сору
3	
1	
2	
6	
output	Сору
1	
2	
3	

# Note

sample test:

1

23

456

1 lies in the first row, 2 lies in the second row, 6 lies in the third row.

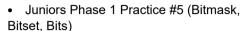
## <u>ICPC Assiut University Training -</u> <u>Juniors Phase 1 Sheets-2022</u>

### **Public**

# **Participant**



## → Group Contests



- Juniors Phase 1 Practice #4 ( Binary search , Two pointers )
- Juniors Phase 1 Practice #3 (STL 2)
- Juniors Phase 1 Practice #2 (STL 1)
- Juniors Phase 1 Practice #1 ( Prefix sum , Frequency Array )

# Juniors Phase 1 Practice #4 ( Binary search, Two pointers)

# **Finished**

**Practice** 



## → About Time Scaling



This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the <a href="mailto:link">link</a>.

# → 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

# → **Submit?**Language: GNU G++20 13.2 (64 bit, win **>**Choose file: No file chosen Submit

→ Last submissions		
Time	Verdict	
Mar/25/2025 15:24	Accepted	
Mar/25/2025 15:14	Wrong answer on test 2	
Mar/25/2025 15:14	Wrong answer on test 5	
	Time  Mar/25/2025 15:24  Mar/25/2025 15:14  Mar/25/2025	