PRACTICE CERTIFICATION NEW COMPETE JOBS LEADERBOARD Search f20180084

All Contests > DSA (2021) Lab 2 > Welcome to Legoland

Welcome to Legoland

Problem Submissions Leaderboard Discussions

Legoland is opening soon and you are in charge of the grand opening. To captivate tourists from all over the world, you want to build a giant cube as the main attraction.

You have k small lego cubes, each of dimension 1x1x1. You want to make one big lego cube using these (not necessarily all) small legos. What is the biggest NxNxN cube you can make out of these small legos?

Note: Please avoid using STL Methods or Brute Force. Use Binary Search for solving the question.

Input Format

There is a single integer input 'k'. It is the number of small cubes you have of dimension 1.

Constraints

1<=k<=10^9

Output Format

Output a single integer N, which is the largest dimension cube(NxNxN) you can make.

Sample Input 0

```
15
```

Sample Output 0

```
2
```

Explanation 0

If you have 15 smaller cubes, the biggest cube you can make is a 2x2x2 cube; and the remaining 7 small cubes will be wasted.

Hence the output is 2.

Submissions: 256
Max Score: 100
Difficulty: Easy

Rate This Challenge:
☆☆☆☆☆

More

Current Buffer (saved locally, editable) C++

```
#include <cmath>
#include <cstdio>
#include <vector>
#include <iostream>
#include <algorithm>
using namespace std;


int main() {
    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    return 0;
}

```

Line: 1 Col: 1

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