



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🛣 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

B. Hungry Sequence

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

lahub and lahubina went to a date at a luxury restaurant. Everything went fine until paying for the food. Instead of money, the waiter wants lahub to write a Hungry sequence consisting of n integers.

A sequence $a_1, a_2, ..., a_n$, consisting of n integers, is Hungry if and only if:

- Its elements are in increasing order. That is an inequality a_i < a_j holds for any two indices i, j (i < j).
- For any two indices i and j (i < j), a_i must **not** be divisible by a_i .

lahub is in trouble, so he asks you for help. Find a Hungry sequence with n elements.

Input

The input contains a single integer: $n (1 \le n \le 10^5)$.

Output

Output a line that contains n space-separated integers $a_1 a_2, ..., a_n (1 \le a_i \le 10^7)$, representing a possible Hungry sequence. Note, that each a_i must not be greater than $10000000 (10^7)$ and less than 1.

If there are multiple solutions you can output any one.

Examples

input	
3	
output	
2 9 15	
input	
5	
output	
11 14 20 27 31	

→ **Attention**

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, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Round #191 (Div. 2)

Finished

→ 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 AQM-IQPC 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

→ Problem tags (math) No tag edit access

→ Contest materials			
Announcement	×		
Tutorial #1	×		
Tutorial #2	×		