

B. Hungry Sequence

time limit per test

1 second

memory limit per test

256 megabytes

input

standard input

output

standard output

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

A sequence a_1, a_2, \dots, 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_j must **not** be divisible by a_i .

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

Input

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

Output

Output a line that contains n space-separated integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^7$), 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