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 $a_1, a_2, ..., a_n$, 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 $(1 \le n \le 10^5)$.

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