D. Petya and His Friends

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Little Petya has a birthday soon. Due this wonderful event, Petya's friends decided to give him sweets. The total number of Petya's friends equals to n.

Let us remind you the definition of the greatest common divisor: $GCD(a_1, ..., a_k) = d$, where d represents such a maximal positive number that each a_i $(1 \le i \le k)$ is evenly divisible by d. At that, we assume that all a_i's are greater than zero.

Knowing that Petya is keen on programming, his friends has agreed beforehand that the 1-st friend gives a_1 sweets, the 2-nd one gives a_2 sweets, ..., the n-th one gives a_n sweets. At the same time, for any i and j $(1 \le i, j \le n)$ they want the $GCD(a_i, a_j)$ not to be equal to 1. However, they also want the following condition to be satisfied: $GCD(a_1, a_2, ..., a_n) = 1$. One more: all the a_i should be distinct.

Help the friends to choose the suitable numbers $a_1, ..., a_n$.

Input

The first line contains an integer n $(2 \le n \le 50)$.

Output

If there is no answer, print "`-1`" without quotes. Otherwise print a set of n distinct positive numbers $a_1, a_2, ..., a_n$. Each line must contain one number. Each number must consist of not more than 100 digits, and must not contain any leading zeros. If there are several solutions to that problem, print any of them.

Do not forget, please, that all of the following conditions must be true:

- For every i and j $(1 \le i, j \le n)$: $GCD(a_i, a_j) \ne 1$
- $GCD(a_1, a_2, ..., a_n) = 1$
- For every i and j $(1 \le i, j \le n, i \ne j)$: $a_i \ne a_j$

Please, do not use `%lld` specificator to read or write 64-bit integers in C++. It is preffered to use `cout` (also you may use `%I64d`).

Examples

input
3

output
99 55 11115

input
4

output
385 360 792 8360