A. Perfect Permutation

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

A *permutation* is a sequence of integers $p_1, p_2, \ldots, p_n$, consisting of n distinct positive integers, each of them doesn't exceed n. Let's denote the i-th element of permutation p as p_i. We'll call number n the size of permutation $p_1, p_2, \ldots, p_n$.

Nickolas adores permutations. He likes some permutations more than the others. He calls such permutations perfect. A *perfect* permutation is such permutation p that for any i $(1 \le i \le n)$ (n is the permutation size) the following equations hold $p_{p_i} = i$ and $p_i \neq i$. Nickolas asks you to print any perfect permutation of size n for the given n.

Input

A single line contains a single integer n $(1 \le n \le 100)$ — the permutation size.

Output

If a perfect permutation of size n doesn't exist, print a single integer -1. Otherwise print n distinct integers from 1 to n, $p_1, p_2, \ldots, p_n$ — permutation p, that is perfect. Separate printed numbers by whitespaces.

Examples

input
1
output
-1

input
2
output
2 1

input
4
output
2 1 4 3

→ **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 #144 (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 ACM-ICPC 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**

implementation math

No tag edit access

→ **Contest materials**

- Announcement
- Tutorial