A. Perfect Permutation

A *permutation* is a sequence of integers $p_1, p_2, ..., p_n$, 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 $p_1, p_2, ..., p_n$.

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 $p_i \ne i$. 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, $p_1, p_2, ..., p_n$ — 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
```