# C. Lucky Permutation

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

A permutation $p$ of size $n$ is the sequence $p_1, p_2, ..., p_n$, consisting of $n$ distinct integers, each of them is from $1$ to $n$ $(1 \le p_i \le n)$.

A lucky permutation is such permutation $p$, that any integer $i$ $(1 \le i \le n)$ meets this condition $p_{p_i} = n - i + 1$.

You have integer $n$. Find some lucky permutation $p$ of size $n$.

## Input

The first line contains integer $n$ $(1 \le n \le 10^5)$ — the required permutation size.

## Output

Print "-1" (without the quotes) if the lucky permutation $p$ of size $n$ doesn't exist.

Otherwise, print $n$ distinct integers $p_1, p_2, ..., p_n$ $(1 \le p_i \le n)$ after a space — the required permutation.

If there are multiple answers, you can print any of them.

### Examples

| input |
| --- |
| 1 |
| output |
| 1 |

| input |
| --- |
| 2 |
| output |
| -1 |

| input |
| --- |
| 4 |
| output |
| 2 4 1 3 |

| input |
| --- |
| 5 |
| output |
| 2 5 3 1 4 |