

# Permutation

Input file:            **standard input**  
Output file:           **standard output**  
Time limit:            1 second  
Memory limit:         256 megabytes

Find out a permutation of  $1\dots n$  that maximizes  $\prod_{i=1}^n lcm(p_i, p_{(i \bmod n)+1})$

## Input

An integer,  $n \leq 10^5$ .

## Output

$n$  integers, the answer.

## Examples

standard input	standard output
3	1 2 3
7	1 2 3 4 5 6 7