

## Problem E. Calculating Function

**Time limit** 1000 ms

**Mem limit** 262144 kB

For a positive integer  $n$  let's define a function  $f$ :

$$f(n) = -1 + 2 - 3 + \dots + (-1)^n n$$

Your task is to calculate  $f(n)$  for a given integer  $n$ .

### Input

The single line contains the positive integer  $n$  ( $1 \leq n \leq 10^{15}$ ).

### Output

Print  $f(n)$  in a single line.

### Examples

Input	Output
4	2

Input	Output
5	-3

### Note

$$f(4) = -1 + 2 - 3 + 4 = 2$$

$$f(5) = -1 + 2 - 3 + 4 - 5 = -3$$