

P. Calculating Function

time limit per test: 1 second🔒

memory limit per test: 256 megabytes

input: standard input

output: standard output

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

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

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	Copy
4	
output	Copy
2	
input	Copy
5	
output	Copy
-3	

Note

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

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

Assiut University Training - Newcomers

Public

Participant



→ About Group



[Group website](#)

→ Group Contests

- Sheet #10 (General Hard)
- Sheet #9 (General medium)
- Sheet #8 (General easy)
- Sheet #7 (Recursion)
- Sheet #6 (Math - Geometry)
- Sheet #5 (Functions)
- Sheet #4 (Strings)
- Contest #3.1
- Sheet #3 (Arrays)
- Contest #2
- Sheet #2 (Loops)
- Contest #1
- Sheet #1 (Data type - Conditions)

Sheet #9 (General medium)

Finished

Practice



→ About Time Scaling

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the [link](#).