[A - Calculating Function](https://vjudge.net/problem/CodeForces-486A" \t "_blank)

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

*f*(*n*) =  - 1 + 2 - 3 + .. + ( - 1)*nn*

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

**Input**

The single line contains the positive integer *n* (1 ≤ *n* ≤ 1015).

**Output**

Print *f*(*n*) in a single line.

**Examples**

**Input**

4

**Output**

2

**Input**

5

**Output**

-3

**Note**

*f*(4) =  - 1 + 2 - 3 + 4 = 2

*f*(5) =  - 1 + 2 - 3 + 4 - 5 =  - 3

#include <iostream>

using namespace *std*;

int main(void) {

*ios*::*sync\_with\_stdio*(0);

*cin*.*tie*(0);

*cout*.*tie*(0);

long long int n; *cin* >> n;

long long sum = (n & 1 ? -1 : 1)\*(n + 1) / 2;

*cout* << sum << "\n";

return 0;

}