

Mock CCC '18 Contest 1 J5/S3 - A Simulation Problem

Time limit: 0.16s **Memory limit:** 1G

Java: 0.6s

Python: 0.6s

Consider the following function:

```
function(N):
    # in some programming languages, 64-bit integers will be required to represent "threshold"
    threshold = N*(N-1)/2
    K = 1
    # in some programming languages, 64-bit integers will be required to represent "count"
    count = 0
    while K < N:
        L = K+1
        print K
        while L <= N:
            count += 1
            L += 1
            if 2 * count >= threshold:
                exit function
        K += 1
```

Given N , compute the last number this function prints out.

Constraints

$$2 \leq N \leq 10^9$$

Input Specification

The input consists of a single line containing the integer N .

Output Specification

Print, on a single line, the last number this function will print out.

Sample Input 1

4

Sample Output 1

1

Sample Input 2

7

Sample Output 2

2

Sample Input 3

10

Sample Output 3

3

Sample Input 4

1919

Sample Output 4

562

Sample Input 5

290976843

Sample Output 5

85225144