Problem E. Odd-even

Input file:	`oddeven.in`
Output file:	`oddeven.out`
Time limit:	2 seconds
Memory limit:	256 megabytes
Detailed Feedback:	full

You are given an increasing sequence of positive integers $1, 2, 4, 5, 7, 9, 10, 12, 14, 16, 17, \ldots$ It is formed by taking one odd integer, then two even integers, then three odd integers and so on. Output N-th element of this sequence.

Input

One positive integer N ($1 \leq N \leq 10^{100}$).

Output

Output one integer N-th element of the sequence.

Examples

oddeven.in	oddeven.out
1	1
4	5

50% of tests contain $N \leq 10^{18}$.