

# Consecutive sequence

We define consecutive sequence as a sequence of integer numbers  $\{n, n+1, n+2, \dots, n+m\}$ . For each given positive integer  $N \leq 10^7$  calculate number of such sequences which sum is equal to  $N$ .

## Input

The input file consists of multiple lines (about  $10^3$  in the first data set and  $10^5$  in the second), each line contains integer  $N$ . The input is terminated with  $N = 0$ , which should not be processed.

## Output

Expected number in each line

## Example

**Input:**

500  
0

**Output:**

8