

## Arranging Coins

You have  $n$  coins and you want to build a staircase with these coins. The staircase consists of  $k$  rows where the  $i^{th}$  row has exactly  $i$  coins. The last row of the staircase may be incomplete.

Given the integer  $n$ , return the number of **complete rows** of the staircase you will build.

### Input:

- Input consists of a single integer  $n$  ( $1 \leq n \leq 2^{31} - 1$ ), the amount of coins you have.

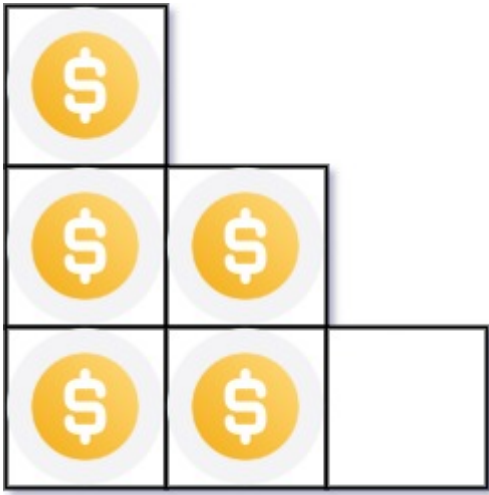
### Output:

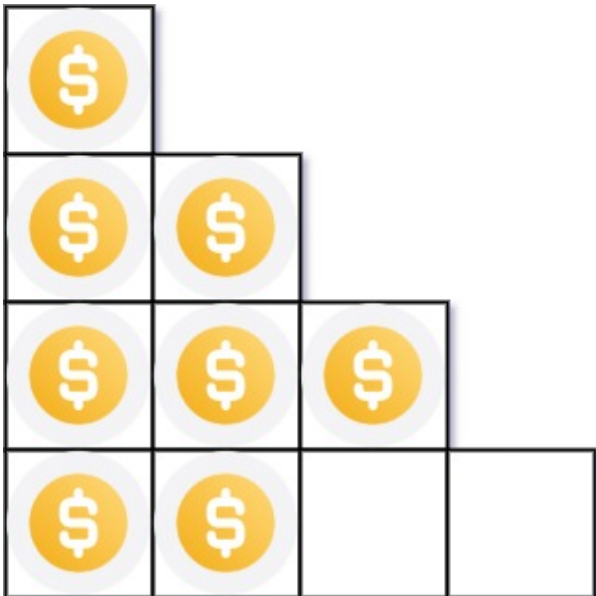
- Output a single integer (the number of complete rows of the staircase you will build).

### Samples:

Input	Output
5	2
8	3

### Explanation:

**Sample 1**  


**Sample 2**  


### Tip:

What is the formula of the sum of the first  $n$  natural numbers?  $1 + 2 + 3 + \dots + n$

Source: <https://leetcode.com/problems/arranging-coins/>