There are n children standing in a line. Each child is assigned a rating value given in the integer array ratings.

You are giving candies to these children subjected to the following requirements:

* Each child must have at least one candy.
* Children with a higher rating get more candies than their neighbors.

Return *the minimum number of candies you need to have to distribute the candies to the children*.

**Example 1:**

Input: ratings = [1,0,2]  
Output: 5  
Explanation: You can allocate to the first, second and third child with 2, 1, 2 candies respectively.

**Example 2:**

Input: ratings = [1,2,2]  
Output: 4  
Explanation: You can allocate to the first, second and third child with 1, 2, 1 candies respectively.  
The third child gets 1 candy because it satisfies the above two conditions.

**Constraints:**

* n == ratings.length
* 1 <= n <= 2 \* 104
* 0 <= ratings[i] <= 2 \* 104