

# Problem 135: Candy

## Problem Information

**Difficulty:** Hard

**Acceptance Rate:** 47.53%

**Paid Only:** No

**Tags:** Array, Greedy

## Problem Description

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`

## Code Snippets

### C++:

```
class Solution {
public:
    int candy(vector<int>& ratings) {
        }
    };
}
```

### Java:

```
class Solution {
    public int candy(int[] ratings) {
        }
    }
}
```

### Python3:

```
class Solution:
    def candy(self, ratings: List[int]) -> int:
```