135. Candy

There are *N* children standing in a line. Each child is assigned a rating value.

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.

What is the minimum candies you must give?

Example 1:

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

Example 2:

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

给孩子分配糖果

Greedy, Array

every child must have at least one candy, and more candies than its neighbors with a higher rating value

1. iterate left to right [1, size), if `cur > before`, `left[i] = left[i-1]+1`
2. iterate right to left [size-2, 0], if `cur > after`, `right[i] = right[i+1]+1`
3. iterate two candy arrays, sum the max element from two arrays.
4. 只关注增量，如果rating更大则把前一位的糖果数拿过来 + 1，最后取两个数组各自最大值得和

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455. Assign Cookies

Assume you are an awesome parent and want to give your children some cookies. But, you should give each child at most one cookie.

Each child `i` has a greed factor `g[i]`, which is the minimum size of a cookie that the child will be content with; and each cookie `j` has a size `s[j]`. If `s[j] >= g[i]`, we can assign the cookie `j` to the child `i`, and the child `i` will be content. Your goal is to maximize the number of your content children and output the maximum number.

Example 1:

```
Input: g = [1,2,3], s = [1,1]
Output: 1
Explanation: You have 3 children and 2 cookies. The greed factors of 3 children are 1,
And even though you have 2 cookies, since their size is both 1, you could only make the
You need to output 1.
```

Example 2:

```
Input: g = [1,2], s = [1,2,3]
Output: 2
Explanation: You have 2 children and 3 cookies. The greed factors of 2 children are 1,


You have 3 cookies and their sizes are big enough to gratify all of the children,
You need to output 2.
```

Constraints:

- `1 <= g.length <= 3 * 10^4`
- `0 <= s.length <= 3 * 10^4`
- `1 <= g[i], s[j] <= 2^31 - 1`

最大化分配饼干

Greedy, Array

assign the minimum cookie to the minimum child

1. sort arrays of cookie and children
2. iterate the arrays with two pointers
3. move child pointer forward when the cookie is greater than child (content)
4. return child pointer