

Problem 611: Valid Triangle Number

Problem Information

Difficulty: Medium

Acceptance Rate: 56.44%

Paid Only: No

Tags: Array, Two Pointers, Binary Search, Greedy, Sorting

Problem Description

Given an integer array `nums`, return _the number of triplets chosen from the array that can make triangles if we take them as side lengths of a triangle_.

Example 1:

Input: nums = [2,2,3,4] **Output:** 3 **Explanation:** Valid combinations are: 2,3,4 (using the first 2) 2,3,4 (using the second 2) 2,2,3

Example 2:

Input: nums = [4,2,3,4] **Output:** 4

Constraints:

* `1 <= nums.length <= 1000` * `0 <= nums[i] <= 1000`

Code Snippets

C++:

```
class Solution {
public:
    int triangleNumber(vector<int>& nums) {
    }
```

```
};
```

Java:

```
class Solution {  
    public int triangleNumber(int[] nums) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def triangleNumber(self, nums: List[int]) -> int:
```