Problem 1679: Max Number of K-Sum Pairs

Problem Information

Difficulty: Medium
Acceptance Rate: 56.69%
Paid Only: No
Tags: Array, Hash Table, Two Pointers, Sorting

Problem Description

You are given an integer array `nums` and an integer `k`.

In one operation, you can pick two numbers from the array whose sum equals `k` and remove them from the array.

Return _the maximum number of operations you can perform on the array_.

Example 1:

Input: nums = [1,2,3,4], k = 5 **Output:** 2 **Explanation:** Starting with nums = [1,2,3,4]: - Remove numbers 1 and 4, then nums = [2,3] - Remove numbers 2 and 3, then nums = [] There are no more pairs that sum up to 5, hence a total of 2 operations.

Example 2:

Input: nums = [3,1,3,4,3], k = 6 **Output:** 1 **Explanation:** Starting with nums = [3,1,3,4,3]: - Remove the first two 3's, then nums = [1,4,3] There are no more pairs that sum up to 6, hence a total of 1 operation.

Constraints:

* `1 <= nums.length <= 105` * `1 <= nums[i] <= 109` * `1 <= k <= 109`

Code Snippets

C++:

```
class Solution {
public:
int maxOperations(vector<int>& nums, int k) {

}
};
```

Java:

```
class Solution {
public int maxOperations(int[] nums, int k) {

}
}
```

Python3:

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