Problem 881: Boats to Save People

Problem Information

Difficulty: Medium
Acceptance Rate: 60.97%
Paid Only: No
Tags: Array, Two Pointers, Greedy, Sorting

Problem Description

You are given an array `people` where `people[i]` is the weight of the `ith` person, and an **infinite number of boats** where each boat can carry a maximum weight of `limit`. Each boat carries at most two people at the same time, provided the sum of the weight of those people is at most `limit`.

Return _the minimum number of boats to carry every given person_.

Example 1:

Input: people = [1,2], limit = 3 **Output:** 1 **Explanation:** 1 boat (1, 2)

Example 2:

Input: people = [3,2,2,1], limit = 3 **Output:** 3 **Explanation:** 3 boats (1, 2), (2) and (3)

Example 3:

Input: people = [3,5,3,4], limit = 5 **Output:** 4 **Explanation:** 4 boats (3), (3), (4), (5)

Constraints:

* `1 <= people.length <= 5 * 104` * `1 <= people[i] <= limit <= 3 * 104`

Code Snippets

C++:

```
class Solution {
public:
int numRescueBoats(vector<int>& people, int limit) {

}
};
```

Java:

```
class Solution {
public int numRescueBoats(int[] people, int limit) {

}
}
```

Python3:

```
class Solution:
def numRescueBoats(self, people: List[int], limit: int) -> int:
```