

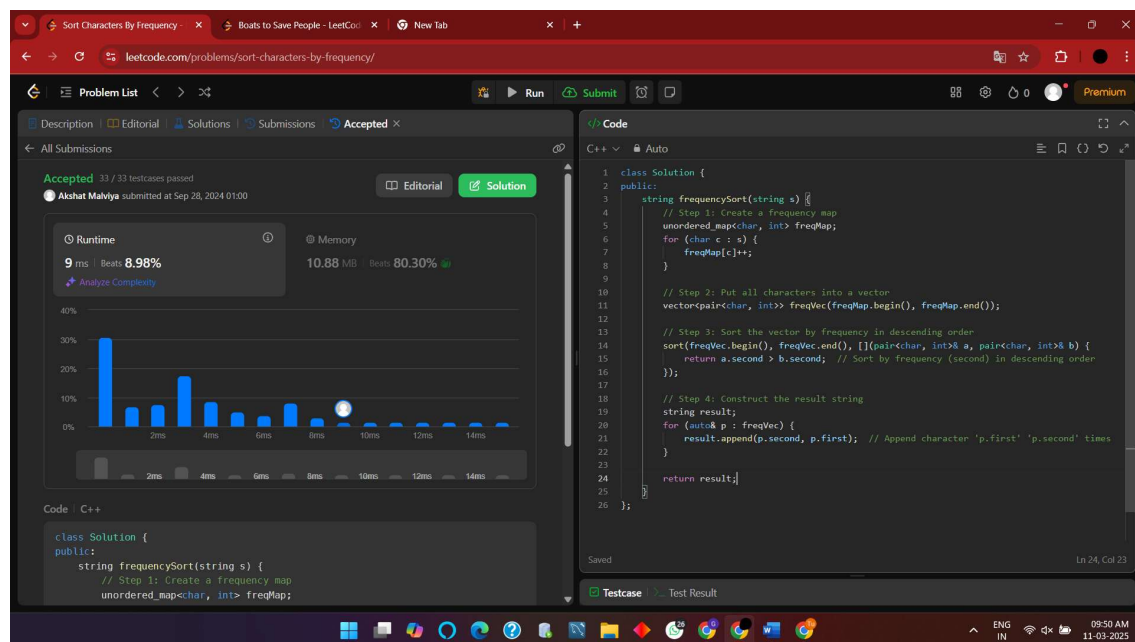
ASSIGNMENT 5 AP

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22BCS15846

FL_IOT_603/A

451. [Sort Characters By Frequency](#)



881. [Boats to Save People](#)

Sort Characters By Frequency · x Boats to Save People - LeetCode · x New Tab · x +

leetcode.com/problems/boats-to-save-people/

Problem List < > x Run Submit x Premium

Description Editorial Solutions Submissions Accepted x

All Submissions

Accepted 78 / 78 testcases passed
Akshat Mahiya submitted at Feb 28, 2025 07:49

Editorial Solution

Runtime 16 ms | Beats 65.39%
Memory 45.75 MB | Beats 68.69%

Analyze Complexity

Code C++

```
class Solution {
public:
    int numRescueBoats(vector<int>& people, int limit) {
        sort(people.begin(), people.end());
        int n = people.size();
        int i = 0;
        int j = n-1;
        int count = 0;
        while(i <= j){
            if(people[i]+people[j]<=limit){
                i++;
                j--;
            }
            count++;
        }
        return count;
    }
};
```

Saved Ln 17, Col 20

Testcase Test Result

Windows Taskbar: 09:51 AM 11-03-2025

389. [Find the difference](#)

Find the Difference - LeetCode · x +

leetcode.com/problems/find-the-difference/submissions/1569842145/

Problem List < > x Run Submit x Premium

Description Accepted x Editorial Solutions Submissions

All Submissions

Accepted 54 / 54 testcases passed
Anuj Yadav09 submitted at Mar 11, 2025 09:59

Editorial Solution

Runtime 0 ms | Beats 100.00%
Memory 9.31 MB | Beats 26.78%

Analyze Complexity

Code C++

```
class Solution {
public:
    char findTheDifference(string s, string t) {
        int result = 0;
        // XOR all characters in both strings
        for (char c : s) {
            result ^= c;
        }
        for (char c : t) {
            result ^= c;
        }
    }
};
```

Saved Ln 16, Col 25

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input

s = "abcd"

t = "abcde"

Output

Windows Taskbar: 09:59 AM 11-03-2025

976. [Largest Perimeter Triangle](#)

Screenshot of a LeetCode submission for the problem "Largest Perimeter Triangle". The submission is accepted, showing a runtime of 8 ms (Beats 41.51%) and memory usage of 25.60 MB (Beats 77.60%). The code is in C++ and implements a solution that sorts the array and checks for valid triangles.

Problem List < > >> **Run** **Submit** **Editorial** **Solutions** **Submissions**

Description Accepted x Editorial Solutions Submissions

All Submissions

Accepted 84 / 84 testcases passed
Anuj_Yadav09 submitted at Mar 11, 2025 10:01

Runtime 8 ms | Beats 41.51% **Memory** 25.60 MB | Beats 77.60%

Analyze Complexity

Code C++

```
class Solution {
public:
    int largestPerimeter(vector<int>& nums) {
        // Sort the array in non-decreasing order
        sort(nums.begin(), nums.end());
        // Check triplets from the end
        for (int i = nums.size() - 1; i >= 2; --i) {
            // Check if nums[i-2], nums[i-1], nums[i] form a valid triangle
            if (nums[i-2] + nums[i-1] > nums[i]) {
                return nums[i-2] + nums[i-1] + nums[i]; // Return the perimeter
            }
        }
        return 0;
    }
};
```

Testcase **Test Result**

Accepted Runtime: 0 ms

Case 1 Case 2

Input
nums =
[2,1,2]

Output
5

Expected

414. [Third Maximum Number](#)

Screenshot of a LeetCode submission for the problem "Third Maximum Number". The submission is accepted, showing a runtime of 4 ms (Beats 27.61%) and memory usage of 14.30 MB (Beats 31.65%). The code is in C++ and implements a solution that uses a set to store distinct elements and returns the maximum of the set.

Problem List < > >> **Run** **Submit** **Editorial** **Solutions** **Submissions**

Description Accepted x Editorial Solutions Submissions

All Submissions

Accepted 34 / 34 testcases passed
Anuj_Yadav09 submitted at Mar 11, 2025 10:03

Runtime 4 ms | Beats 27.61% **Memory** 14.30 MB | Beats 31.65%

Analyze Complexity

Code C++

```
class Solution {
public:
    int thirdMax(vector<int>& nums) {
        // Use a set to store distinct elements
        set<int> distinctNums(nums.begin(), nums.end());
        // If there are fewer than 3 distinct numbers, return the maximum
        if (distinctNums.size() < 3) {
            return *distinctNums.rbegin(); // the largest element in the set
        }
        return *distinctNums.rbegin();
    }
};
```

Testcase **Test Result**

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input
nums =
[3,2,1]

Output
1

Expected

452. [Minimum Number of Arrows to Burst Balloons](#)

Minimum Number of Arrows to Burst Balloons - Problems - LeetCode

Accepted 50 / 50 testcases passed

Anuj_Yadav09 submitted at Mar 11, 2025 10:05

Runtime: 43 ms | Beats 82.05% | Memory: 93.74 MB | Beats 94.10%

Code C++

```
class Solution {
public:
    int findMinArrowShots(vector<vector<int>>& points) {
        if (points.empty()) return 0;
    }
};
```

Testcase 1: Runtime: 3 ms

Input: points = [[10,16],[2,8],[1,6],[7,12]]

Output: 2

973. [K Closest Points to Origin](#)

K Closest Points to Origin - Problems - LeetCode

Accepted 87 / 87 testcases passed

Anuj_Yadav09 submitted at Mar 11, 2025 10:07

Runtime: 93 ms | Beats 33.13% | Memory: 76.32 MB | Beats 44.09%

Code C++

```
class Solution {
// Comparator to help the priority queue work as a max-heap
struct Compare {
    bool operator()(const vector<int>& a, const vector<int>& b) {
    }
};
```

Testcase 1: Runtime: 0 ms

Input: points = [[1,3],[-2,2]]

k = 1

1338. [Reduce Array Size to The Half](#)

leetcode.com/problems/reduce-array-size-to-the-half/submissions/1569851083/

Problem List < > Run Submit

Description Accepted Editorial Solutions Submissions

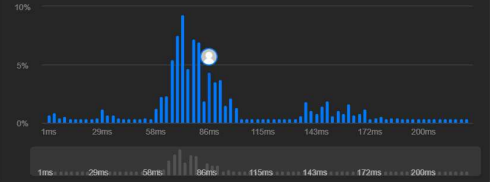
All Submissions

Accepted 33 / 33 testcases passed
Anuj_Yadav09 submitted at Mar 11, 2025 10:09

Editorial Solution

Runtime 86 ms Beats 43.35%
Memory 85.53 MB Beats 22.99%

Analyze Complexity



Code C++

```
class Solution {
public:
    int minSetSize(vector<int>& arr) {
        unordered_map<int, int> freq;

        // Count the frequency of each element in the array
        for (int num : arr) {
            freq[num]++;
        }

        // Store the frequencies in a vector
    }
};
```

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input

arr =
[3,3,3,3,5,5,2,2,7]

Output

2

Expected

ENG IN 10:09 AM 11-03-2025