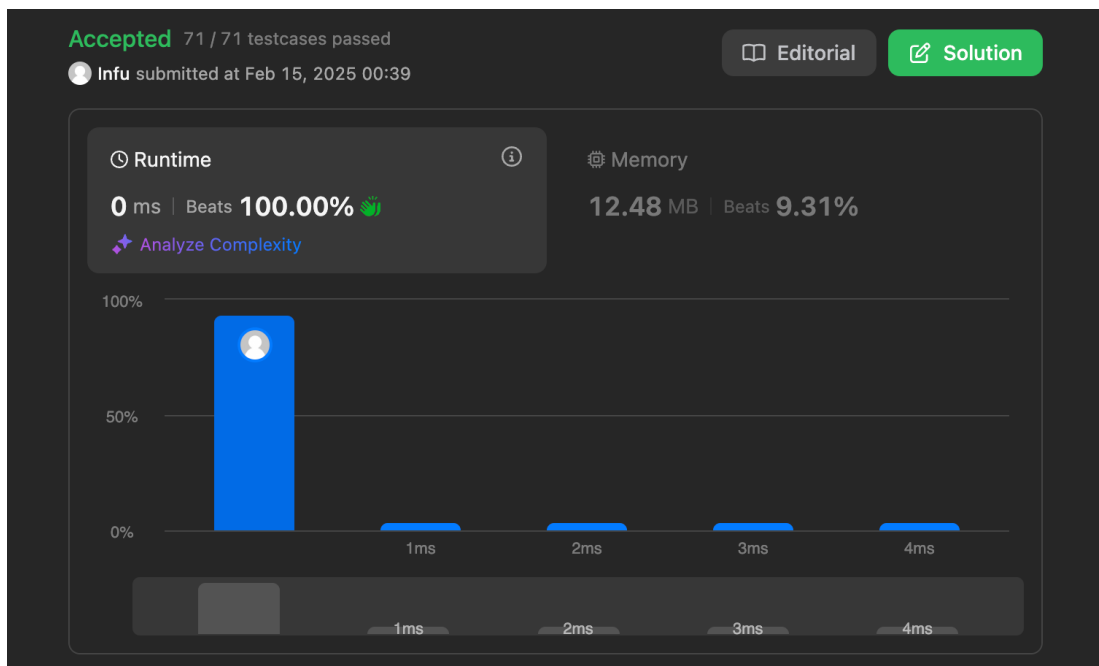


389.Find the difference

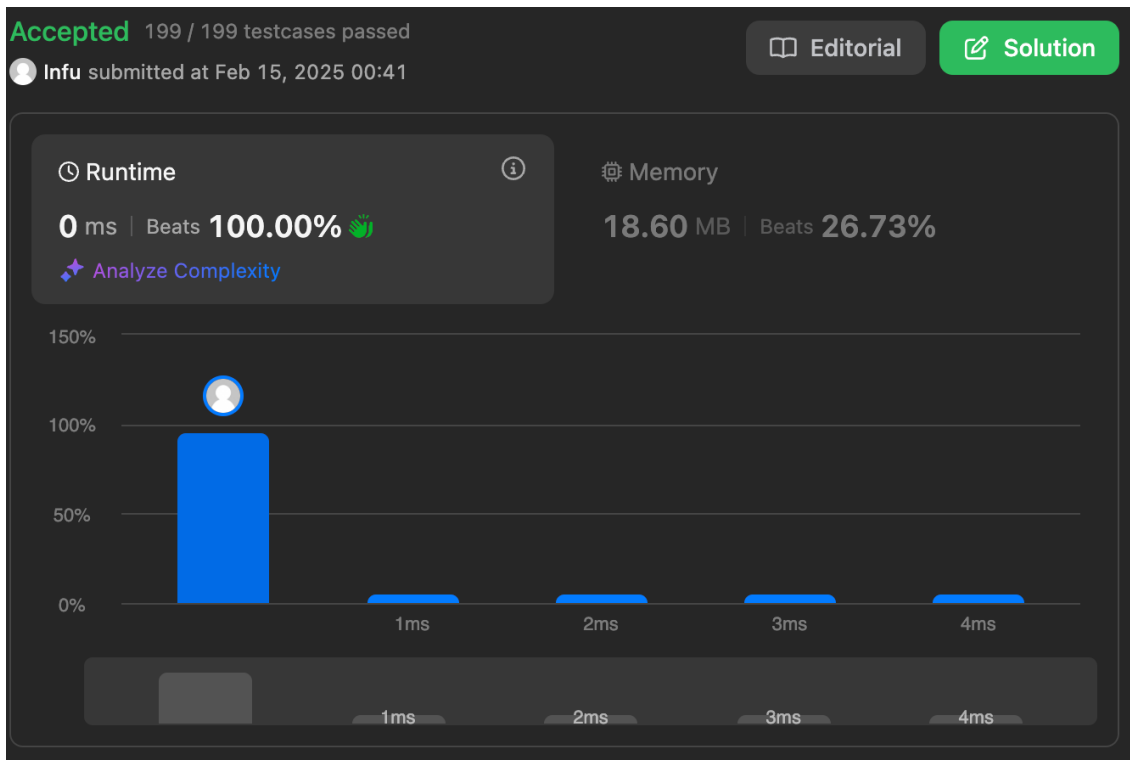
```
class Solution {
public:
    int findDifference(vector<int>& nums1, vector<int>& nums2) {
        unordered_set<int> set1(nums1.begin(), nums1.end()),
set2(nums2.begin(), nums2.end());

        vector<int> res1, res2;
        for (int num : set1) {
            if (set2.find(num) == set2.end()) res1.push_back(num);
        }
        for (int num : set2) {
            if (set1.find(num) == set1.end()) res2.push_back(num);
        }
        return {res1, res2};
    }
};
```



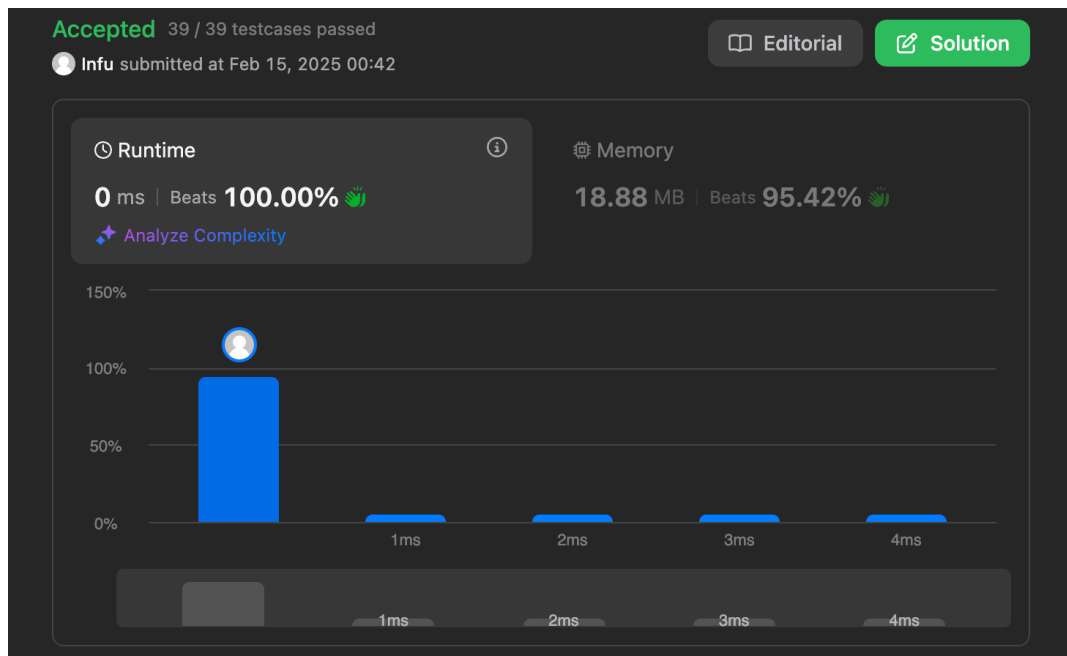
976.Largest Perimeter Triangle

```
class Solution {  
public:  
    int largestPerimeter(vector<int>& nums) {  
        sort(nums.begin(), nums.end());  
        for (int i = nums.size() - 3; i >= 0; --i) {  
            if (nums[i] + nums[i + 1] > nums[i + 2]) {  
                return nums[i] + nums[i + 1] + nums[i + 2];  
            }  
        }  
        return 0;  
    }  
};
```



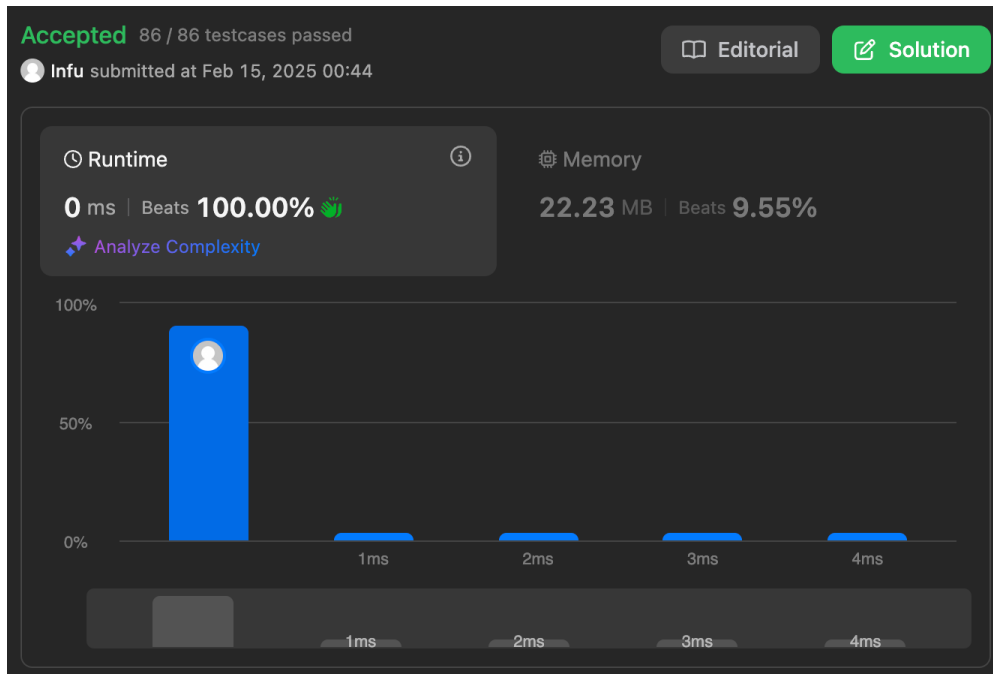
414.Third Maximum Number

```
class Solution {  
public:  
    int thirdMax(vector<int>& nums) {  
        set<int> unique_nums(nums.begin(), nums.end());  
        if (unique_nums.size() < 3) return *unique_nums.rbegin();  
        auto it = unique_nums.end();  
        advance(it, -3);  
        return *it;  
    }  
};
```



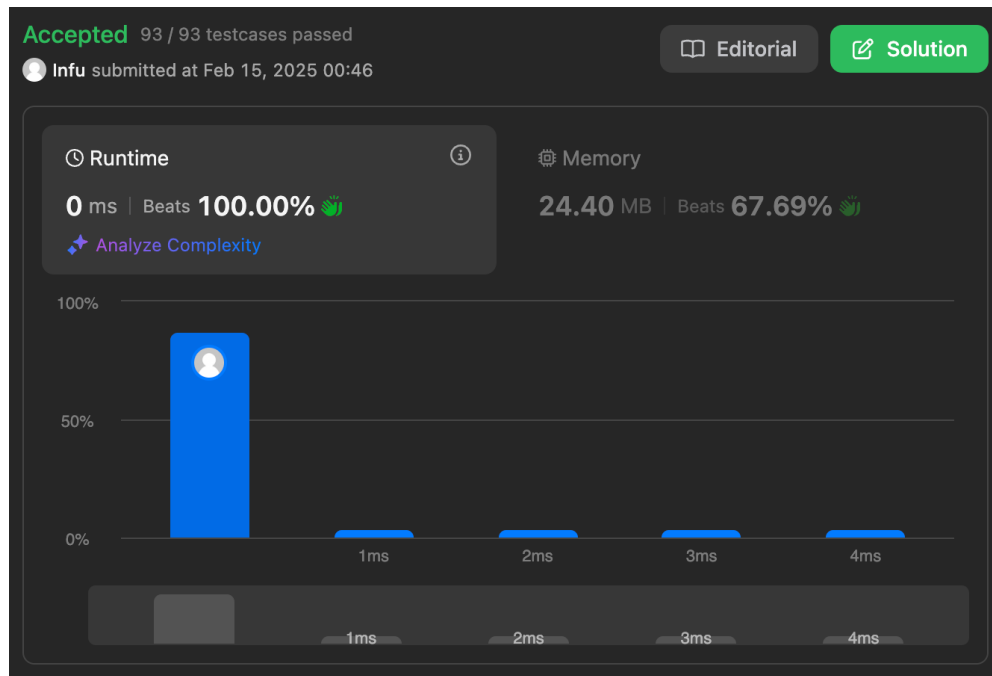
451.Sort Characters By Frequency

```
class Solution {
public:
    string frequencySort(string s) {
        unordered_map<char, int> count;
        for (char c : s) count[c]++;
        priority_queue<pair<int, char>> pq;
        for (auto& p : count) pq.push({p.second, p.first});
        string res;
        while (!pq.empty()) {
            auto [freq, ch] = pq.top(); pq.pop();
            res.append(freq, ch);
        }
        return res;
    }
};
```



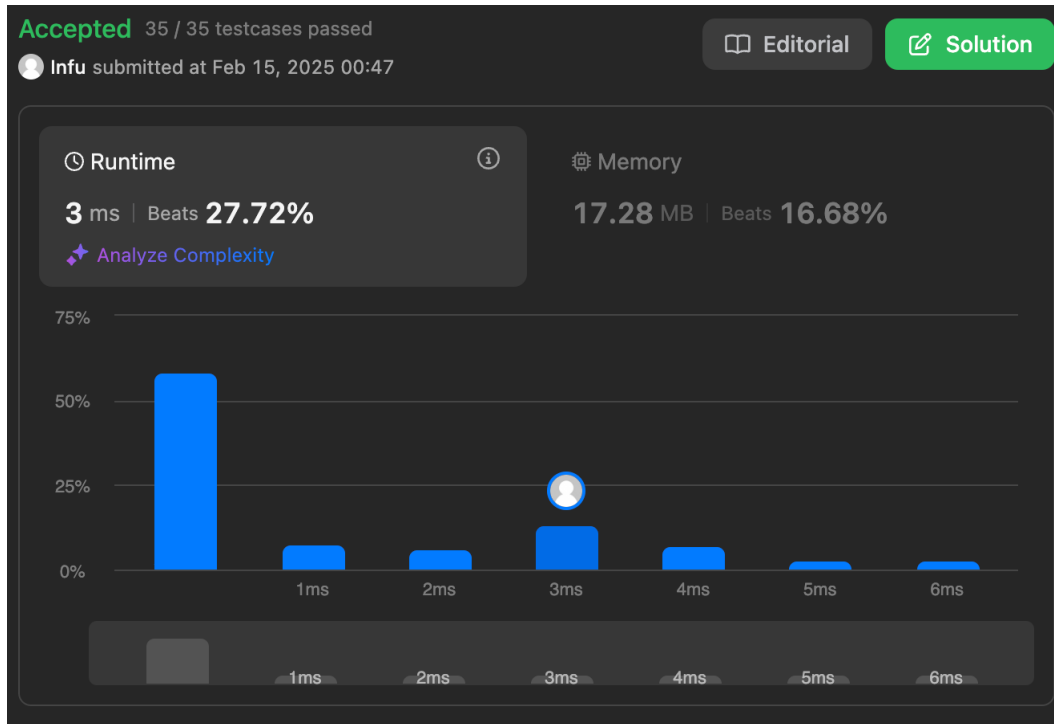
452.Minimum Number of Arrows to Burst Balloons

```
class Solution {
public:
    int findMinArrowShots(vector<vector<int>>& points) {
        if (points.empty()) return 0;
        sort(points.begin(), points.end(), [](auto& a, auto& b) {
return a[1] < b[1]; });
        int arrows = 1, end = points[0][1];
        for (const auto& p : points) {
            if (p[0] > end) {
                arrows++;
                end = p[1];
            }
        }
        return arrows;
    }
};
```



881.Boats to Save People

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



973.K Closest Points to Origin

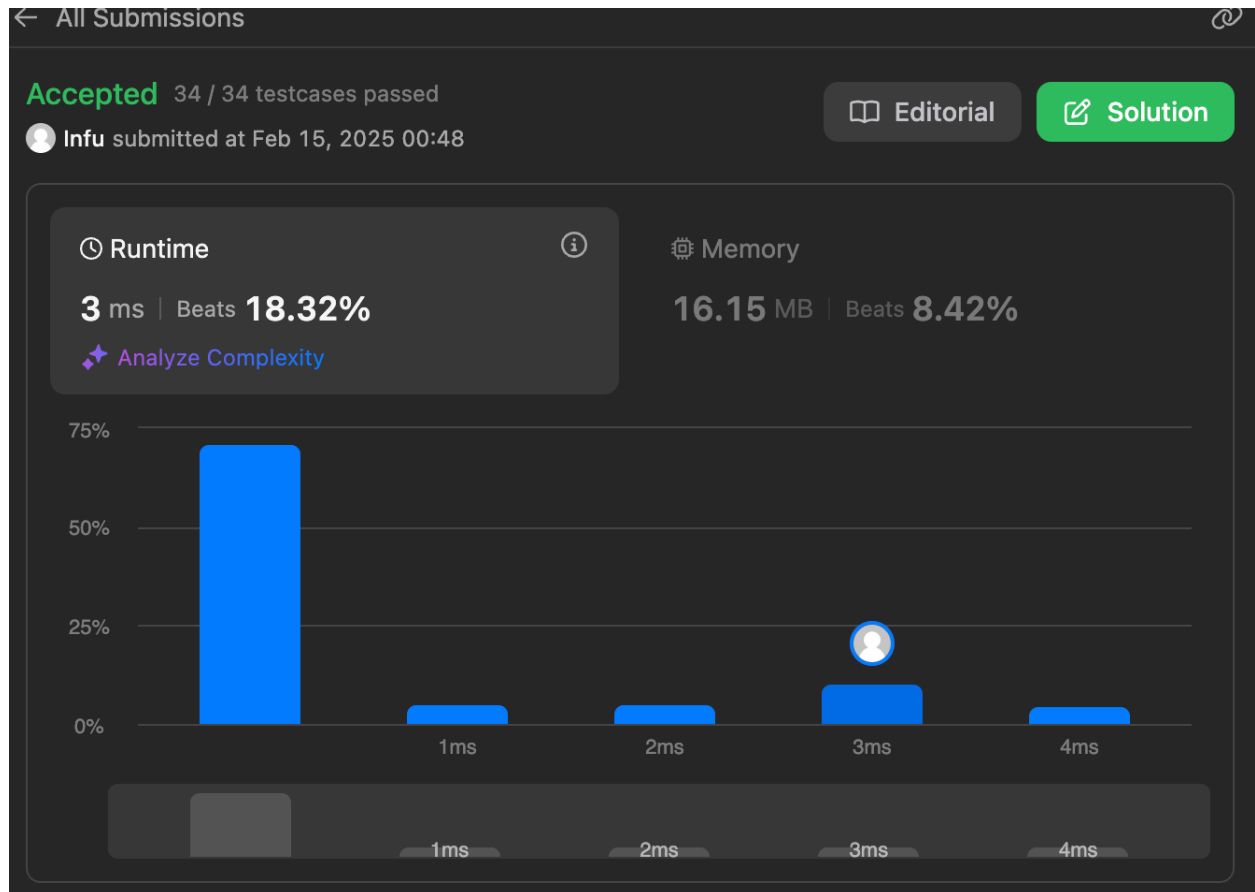
```
class Solution {
public:
    vector<vector<int>> kClosest(vector<vector<int>>& points, int K) {
        priority_queue<pair<double, vector<int>>> maxHeap;
        for (const auto& point : points) {
            double dist = sqrt(point[0] * point[0] + point[1] *
point[1]);
            maxHeap.push({dist, point});
            if (maxHeap.size() > K) maxHeap.pop();
        }
        vector<vector<int>> result;
        while (!maxHeap.empty()) {
            result.push_back(maxHeap.top().second);
            maxHeap.pop();
        }
    }
};
```

```

    }
    return result;
}

};

```



1338.Reduce Array Size to The Half

```

class Solution {
public:
    int reduceArraySize(vector<int>& arr) {
        unordered_map<int, int> count;
        for (int num : arr) count[num]++;
        priority_queue<int> pq;
    }
};

```



```

    for (auto& p : count) pq.push(p.second);
    int size = 0, removed = 0;
    while (removed < arr.size() / 2) {
        removed += pq.top();
        pq.pop();
        size++;
    }
    return size;
}
};

```

