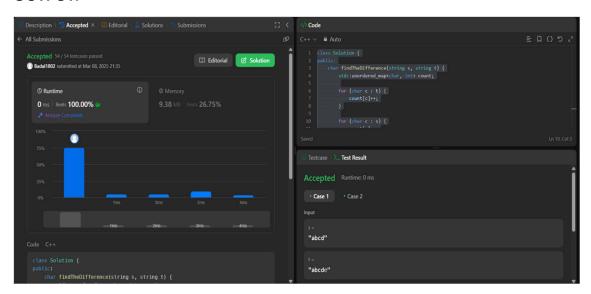
389. Find the diffrence

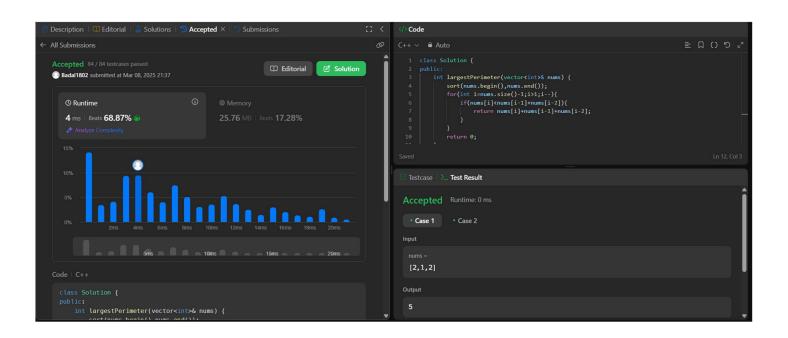
CODE:



976.Largest Perimeter Triangle

CODE:

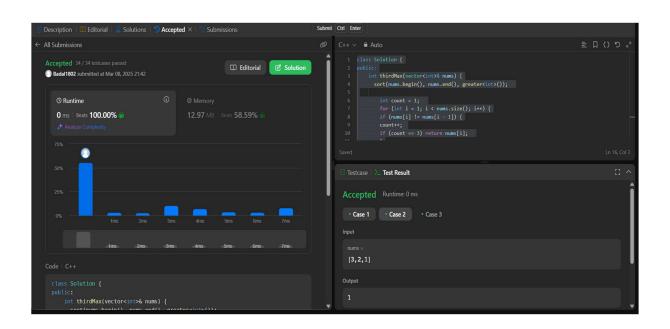
```
class Solution {
public:
    int largestPerimeter(vector<int>& nums) {
        sort(nums.begin(),nums.end());
        for(int i=nums.size()-1;i>1;i--){
            if(nums[i]<nums[i-1]+nums[i-2]){
                return nums[i]+nums[i-1]+nums[i-2];
            }
        }
        return 0;
    }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



414.Third Maximum Number

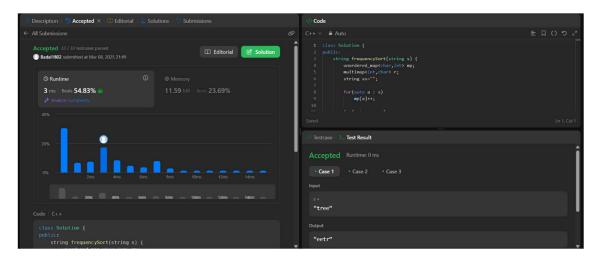
CODE:

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



451.Sort Characters By Frequency

```
class Solution {
public:
  string frequencySort(string s) {
     unordered_map<char,int> mp;
     multimap<int,char> r;
    string ss="";
    for(auto a:s)
       mp[a]++;
    for(auto a:mp)
       r.insert({a.second, a.first});
    for(auto it = r.rbegin(); it != r.rend(); ++it)
       ss += string(it->first, it->second);
    //for(auto it = r.rbegin(); it != r.rend(); ++it){
    // for (int i = 0; i < it->first; ++i) {
    //
            ss += it->second;
    //
           }
    //}
     return ss;
  }
};
```

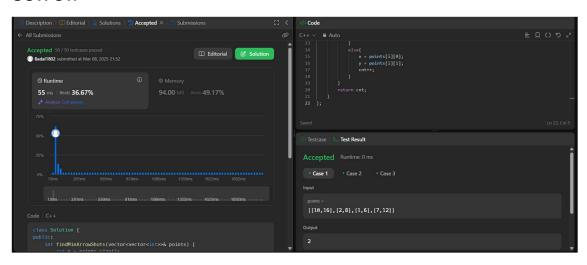


452. Minimum Number of Arrows to Burst Balloons

```
Class Solution {
public:
  int findMinArrowShots(vector<vector<int>>& points) {
     int n = points.size();
    sort(points.begin(), points.end());
    int cnt = 1;
     int x = points[0][0], y = points[0][1];
     for(int i = 1; i < n; i++){
       if((points[i][0] >= x \&\& points[i][0] <= y) | |
         (points[i][1] >= x && points[i][1] <= y)){
         x = max(x, points[i][0]);
         y = min(y, points[i][1]);
       }
       else{
         x = points[i][0];
         y = points[i][1];
```

```
cnt++;
}

return cnt;
}
```



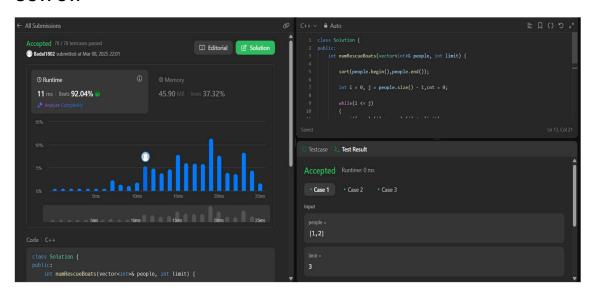
881. Boats to Save People

```
class Solution {
public:
    int numRescueBoats(vector<int>& people, int limit) {
        sort(people.begin(), people.end());

    int i = 0, j = people.size() - 1, cnt = 0;

    while (i <= j) {
        if (people[i] + people[j] <= limit) {</pre>
```

```
++i;
--j;
} else {
--j;
}
++cnt;
}
return cnt;
}
```

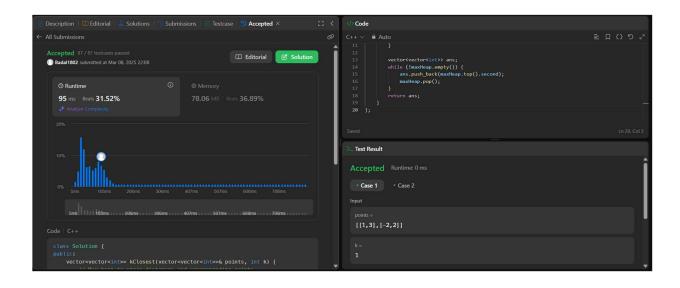


973.K Closest Points to Origin

```
class Solution {
public:
    vector<vector<int>> kClosest(vector<vector<int>>& points, int k) {
    // Max heap to store distances and corresponding points
    priority_queue<pair<int, vector<int>>> maxHeap;
```

```
for (auto& point : points) {
    int distance = point[0] * point[0] + point[1] * point[1];
    maxHeap.push({distance, point});
    if (maxHeap.size() > k) maxHeap.pop(); // Remove farthest point if size > k
}

vector<vector<int>> ans;
while (!maxHeap.empty()) {
    ans.push_back(maxHeap.top().second);
    maxHeap.pop();
}
return ans;
}
```



1338. Reduce Array Size to The Half

CODE:

```
class Solution {
public:
  int minSetSize(vector<int>& arr) {
    unordered_map<int,int>h;
    for(int i = 0; i < arr.size(); i++) h[arr[i]]++;
    priority_queue<int> pq;
    for(auto it: h) pq.push(it.second);
    int ans = 0, minus = 0;
    while(!pq.empty())
      ans++;
      minus += pq.top();
      pq.pop();
      if(minus >= (arr.size()/2)) break;
    return ans;
  }
};
```

