DSA- Assignment-1

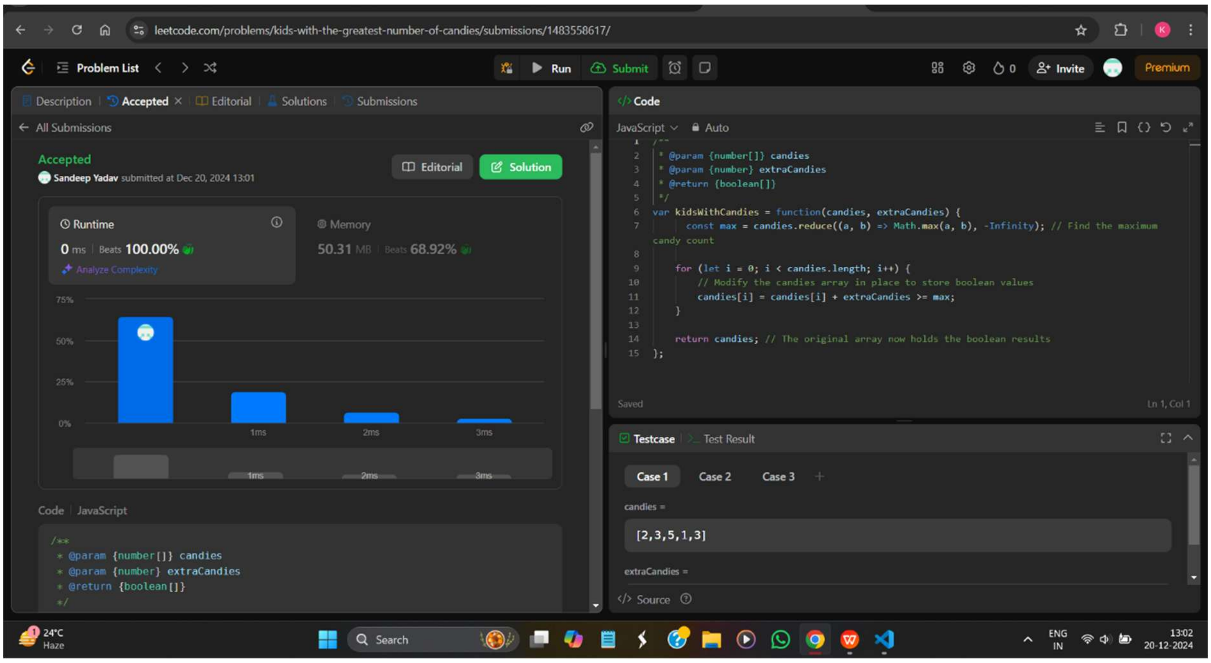
# Questions List :-

1. Question was- https://leetcode.com/problems/kids-with-the-greatest-number-of-candies/description/

Solution Link –https://leetcode.com/problems/kids-with-the-greatest-number-of-candies/submissions/1483558617/

***Time Complexity:* O(n)**

***Space Complexity:* O(1)**



leetcode.com/problems/kids-with-the-greatest-number-of-candies/submissions/1483558617/

Accepted

Sandeep Yadav submitted at Dec 20, 2024 13:01

Runtime: 0 ms | Beats 100.00%

Memory: 50.31 MB | Beats 68.92%

Code | JavaScript

```
/**
 * @param {number[]} candies
 * @param {number} extraCandies
 * @return {boolean[]}
 */
var kidsWithCandies = function(candies, extraCandies) {
    const max = candies.reduce((a, b) => Math.max(a, b), -Infinity); // Find the maximum candy count

    for (let i = 0; i < candies.length; i++) {
        // Modify the candies array in place to store boolean values
        candies[i] = candies[i] + extraCandies >= max;
    }

    return candies; // The original array now holds the boolean results
};
```

Testcase: Case 1

candies =

[2,3,5,1,3]

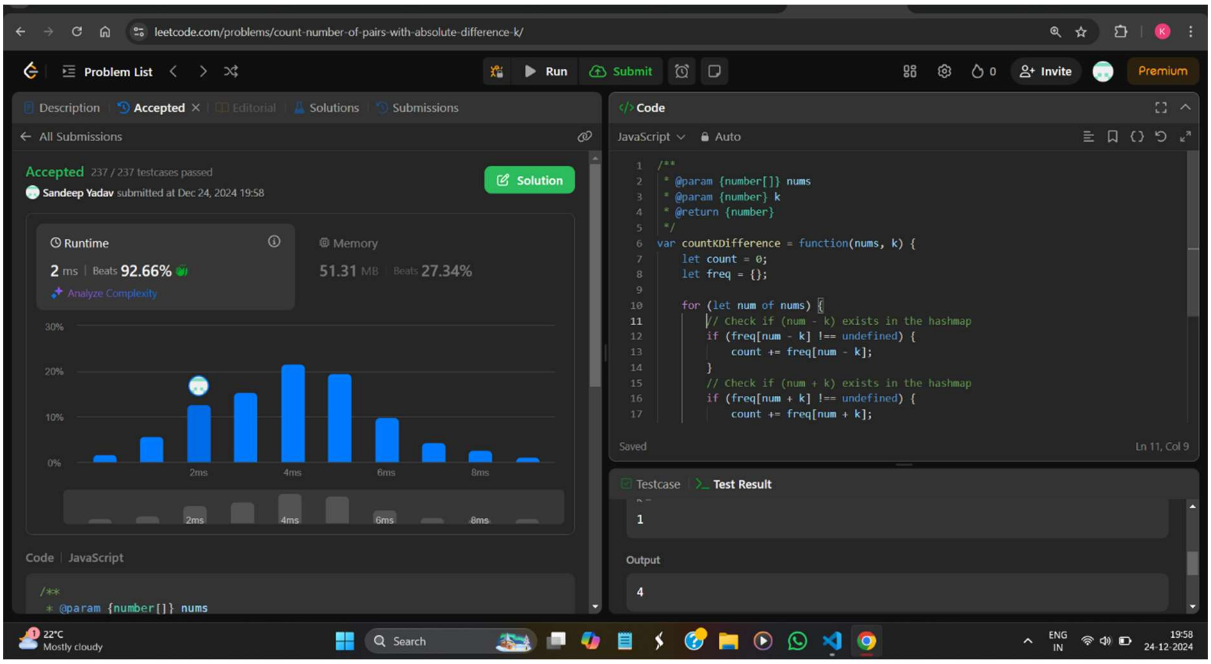
extraCandies =

2. Question was- https://leetcode.com/problems/count-number-of-pairs-with-absolute-difference-k/description/

Solution Link– *https://leetcode.com/problems/count-number-of-pairs-with-absolute-difference-k/submissions/1487226106/*

***Time Complexity:* O(n)**

***Space Complexity:* O(n)**



Accepted 237 / 237 testcases passed

Sandeep Yadav submitted at Dec 24, 2024 19:58

Runtime 2 ms | Beats 92.66%

Memory 51.31 MB | Beats 27.34%

```
/**
 * @param {number[]} nums
 * @param {number} k
 * @return {number}
 */
var countKDifference = function(nums, k) {
    let count = 0;
    let freq = {};

    for (let num of nums) {
        // Check if (num - k) exists in the hashmap
        if (freq[num - k] !== undefined) {
            count += freq[num - k];
        }
        // Check if (num + k) exists in the hashmap
        if (freq[num + k] !== undefined) {
            count += freq[num + k];
```

Saved Ln 11, Col 9

1

Output

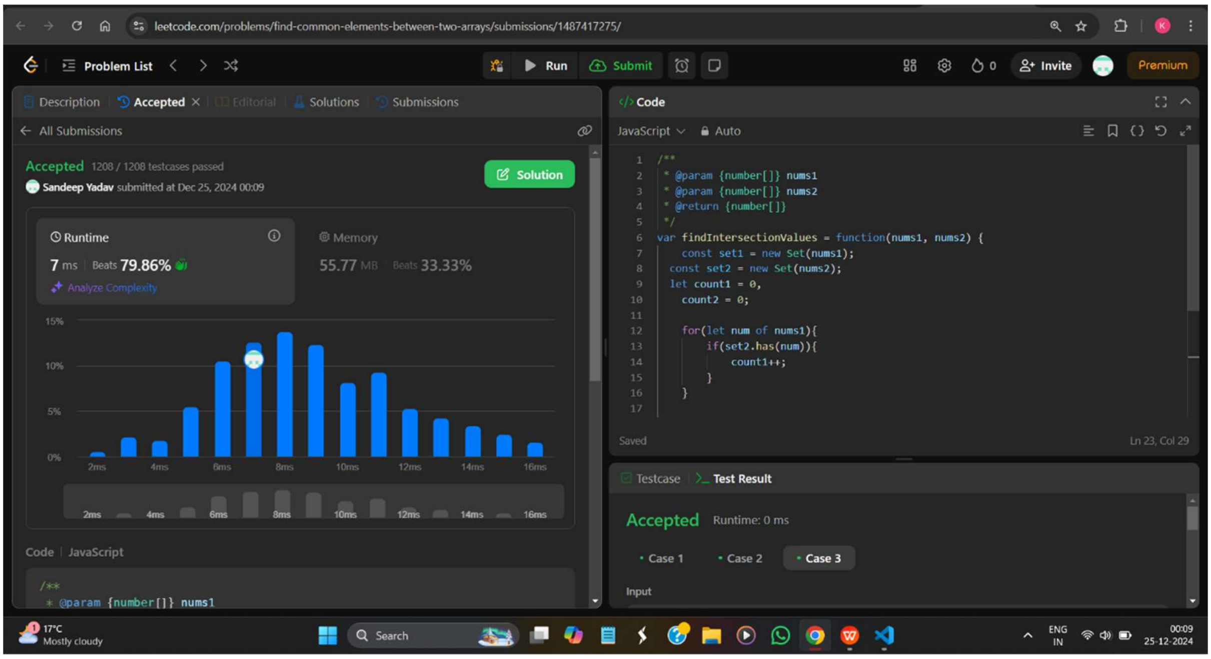
4

3. Question was- https://leetcode.com/problems/find-common-elements-between-two-arrays/description/

Solution Link– https://leetcode.com/problems/find-common-elements-between-two-arrays/submissions/1487417275/

Time Complexity: O(n+m)

Space Complexity: O(n+m)



Accepted 1208 / 1208 testcases passed

Sandeep Yadav submitted at Dec 25, 2024 00:09

Runtime 7 ms | Beats 79.86%

Memory 55.77 MB | Beats 33.33%

```
/**
 * @param {number[]} nums1
 * @param {number[]} nums2
 * @return {number[]}
 */
var findIntersectionValues = function(nums1, nums2) {
    const set1 = new Set(nums1);
  const set2 = new Set(nums2);
  let count1 = 0,
    count2 = 0;

    for(let num of nums1){
        if(set2.has(num)){
            count1++;
        }
    }
```

Saved Ln 23, Col 29

Accepted Runtime: 0 ms

• Case 1 • Case 2 • Case 3

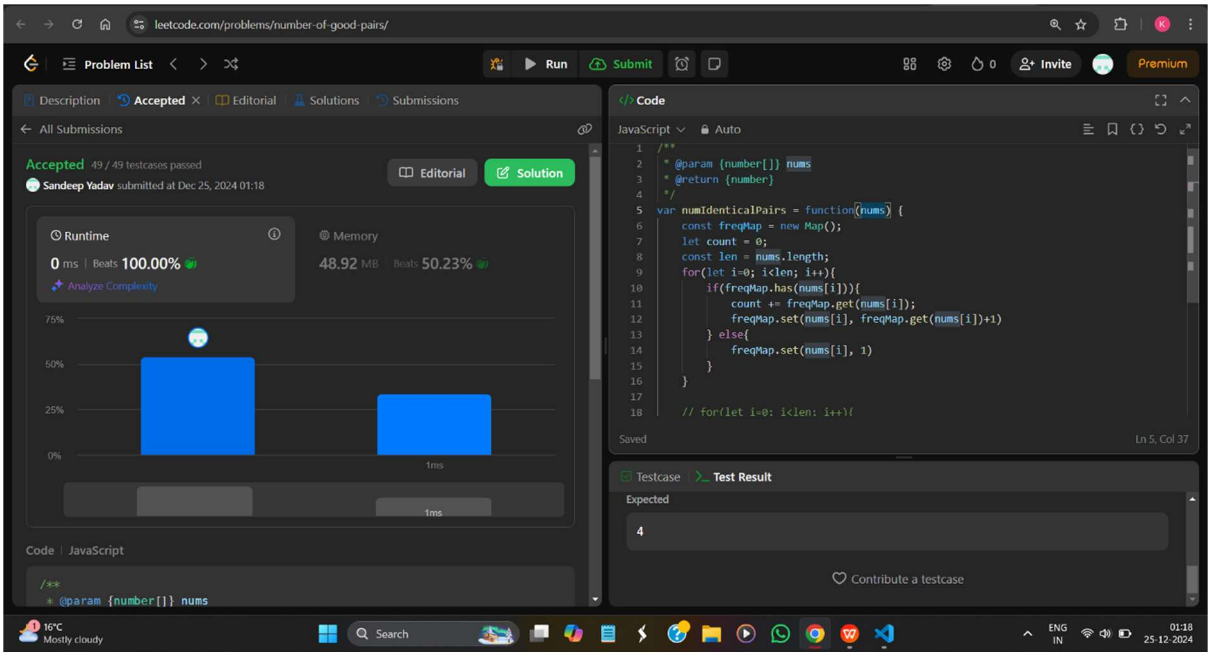
Input

4. Question was- https://leetcode.com/problems/number-of-good-airs/description/

Solution Link– https://leetcode.com/problems/number-of-good-pairs/submissions/1487459465/

Time Complexity: O(n)

Space Complexity: O(u) *//u is number of unique elements*



Accepted 49 / 49 testcases passed

Sandeep Yadav submitted at Dec 25, 2024 01:18

Runtime
0 ms | Beats 100.00%

Analyze Complexity

Memory
48.92 MB | Beats 50.23%

Code | JavaScript

```javascript
/**
 * @param {number[]} nums
 * @return {number}
 */
var numIdenticalPairs = function(nums) {
    const freqMap = new Map();
    let count = 0;
    const len = nums.length;
    for(let i=0; i<len; i++){
        if(freqMap.has(nums[i])){
            count += freqMap.get(nums[i]);
            freqMap.set(nums[i], freqMap.get(nums[i])+1)
        } else{
            freqMap.set(nums[i], 1)
        }
    }

    // for(let i=0: i<len: i++)(
```

Saved

Ln 5, Col 37

Expected

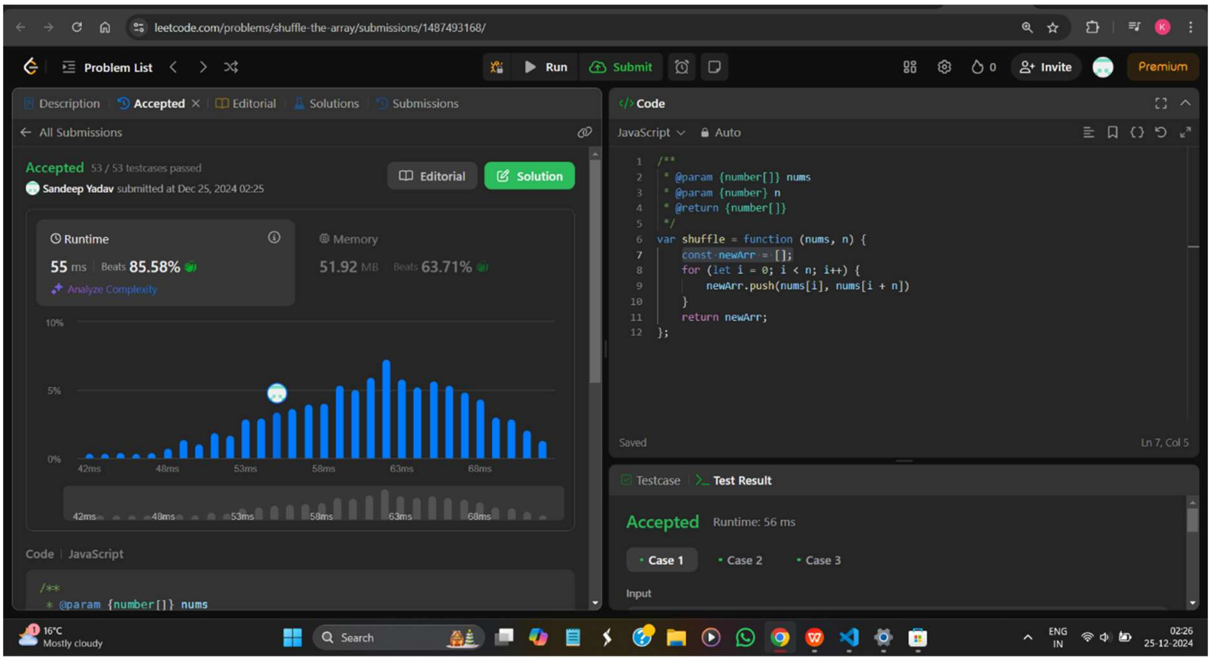
4

5. Question was- https://leetcode.com/problems/shuffle-the-array/

Solution Link- https://leetcode.com/problems/shuffle-the-array/submissions/1487493168/

Time Complexity: O(n)

Space Complexity: O(n)



Accepted 53 / 53 testcases passed

Sandeep Yadav submitted at Dec 25, 2024 02:25

Runtime: 55 ms | Beats 85.58%

Memory: 51.92 MB | Beats 63.71%

Code | JavaScript

```javascript
/**
 * @param {number[]} nums
 * @param {number} n
 * @return {number[]}
 */
var shuffle = function (nums, n) {
    const newArr = [];
    for (let i = 0; i < n; i++) {
        newArr.push(nums[i], nums[i + n])
    }
    return newArr;
};
```

Saved   Ln 7, Col 5

Accepted Runtime: 56 ms

# Key Features :-

- Solutions are less time taking.

Difficulties :-

- Facing Difficulties in Code Optimization.
- Try to make code efficient and use better approach to solve them.

# GitHub Repository Link : -

https://github.com/SandyBhai03/Internshala-Assignments/tree/main/Assignment-Course5/DSA-1/Assignment-1