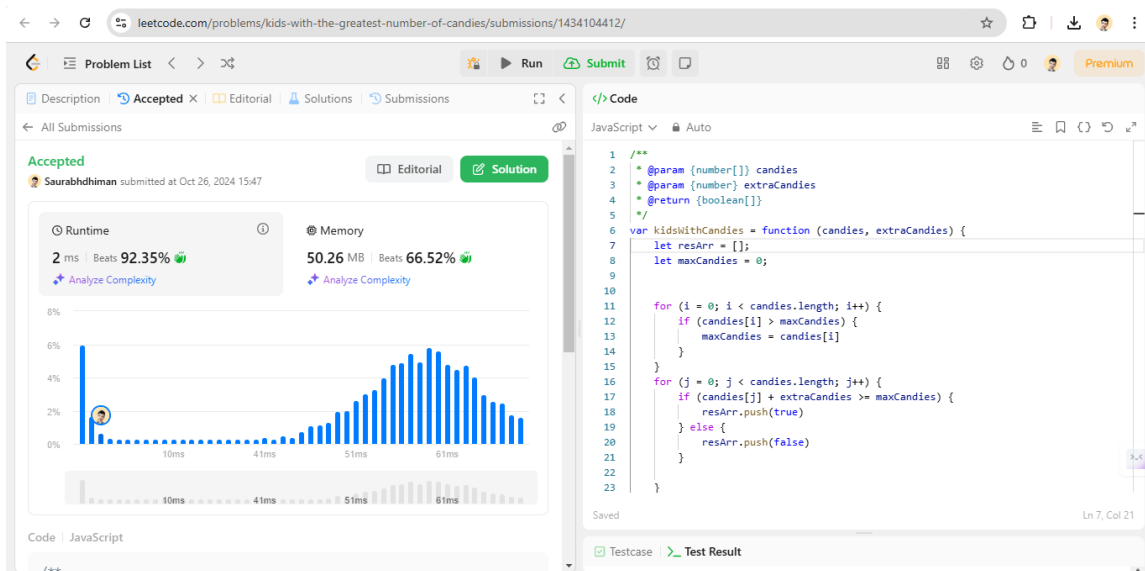


My leetcode profile link - <https://leetcode.com/u/Saurabhdhiman/>

QnO.- 1431

Link - <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/1434112605/>



Description -

Time Complexity-

For first loop = $O(n)$

For second loop = $O(n)$

so, $O(n) + O(n) = O(2n)$

Time complexity = **$O(n)$** because we dont consider 2.

Space Complexity -

resArr will take n number of boolen values -- $O(n)$

i,j, maxCandies will take -- $O(1)$

So Space Complexity = $O(n)$.

Code Explanation -

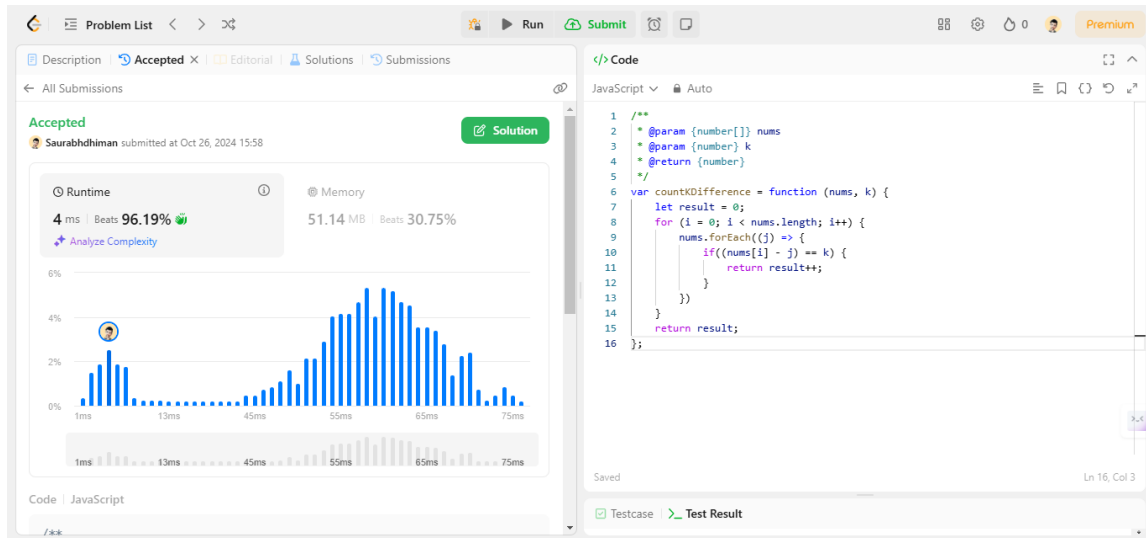
1. Initialized a empty resArr which will store boolean values.
2. maxCandies initialized to 0 so that it will store max candies any kid have.
3. First for loop will iterate through candies array to find max no of candies and it will update maxCandies.
4. Second for loop will check all candies and add extra candies to that and compare with maxCandies.

If extra candies + current candies a kid have greater than or equal max candies push true to result array else push false to result array
5. Return result array containing boolean values.

QNO.- 2006

Link - <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/1434111053/>



Description -

Time Complexity - As we are using two loops and second loop is present inside of first loop so both outer and inner loop will iterate n times.

$$O(n) \times O(n) = O(n^2)$$

Time complexity = **$O(n^2)$**

Space complexity -

result, i, j will take only one space = **$O(1)$** .

so Space Complexity = **$O(1)$** .

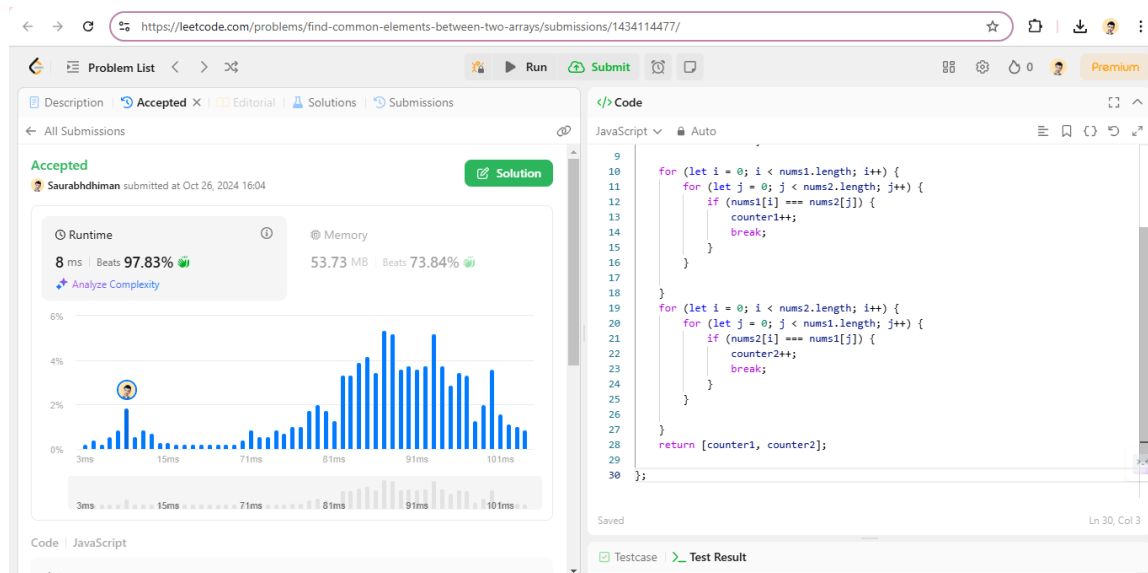
Code Explanation -

1. Initialized a variable result with value 0 which will count and store our value.
2. In for loop i am iterating through nums array to get all the values of array.
3. applying forEach loop on nums array so that all elements will be iterated in j value.
4. applying condition to check difference between nums array and j and i it is equal to k increase our counter i.e result.
5. Return result with counted values.

QNO.- 2956

Link - <https://leetcode.com/problems/find-common-elements-between-two-arrays/description/>

solution link - <https://leetcode.com/problems/find-common-elements-between-two-arrays/submissions/1434114477/>



Description -

Time Complexity-

we are using two nested for loop so,

for first nested for loop - $O(n^2)$

for second nested for loop - $O(n^2)$

Time complexity = $O(n^2) + O(n^2) = O(n^2)$

Space complexity-

counter1, counter2, i, j will take only one space i.e $O(1)$

so space complexity = $O(1)$

Code Explanation -

1. First taken two variables namely counter1 and counter2 that will act as counter for increasing count.
 2. now used a nested for loop 1st loop will iterates nums1 array and second loop will iterate nums2 array.
 3. if elements of nums 1 array = to nums2 array increase the counter.
 4. Used break so that number will count once only even it repeat in num2 array.
 5. Now used again a nested for loop and this time changed such that nums2 values = nums1 value increase counter and a break statement for same reason.
 6. Returned the counter1 and counter 2 in array.
-

QNO.- 1512

Link - <https://leetcode.com/problems/number-of-good-pairs/description/>

solution link- <https://leetcode.com/problems/number-of-good-pairs/submissions/1434116290/>

The screenshot displays the LeetCode interface for the problem "Number of Good Pairs" (1512). The submission status is "Accepted", submitted by Saurabhdhiman on Oct 26, 2024, at 16:07. The runtime is 1 ms, beating 95.37% of other submissions, and the memory usage is 48.22 MB, beating 95.02%. A bar chart shows the runtime distribution across various test cases. The code editor on the right contains the following JavaScript code:

```
1 /**  
2  * @param {number[]} nums  
3  * @return {number}  
4  */  
5 var numIdenticalPairs = function (nums) {  
6     let counter = 0;  
7     for (let i = 0; i < nums.length; i++) {  
8         for (let j = 0; j < i; j++) {  
9             if (nums[i] == nums[j]) {  
10                 counter++;  
11             }  
12         }  
13     }  
14     return counter;  
15 };
```

Description -

Time Complexity-

As we are using two nested for loop so $O(n^2)$

Space Complexity -

Counter,i,j - $O(1)$

so space complexity will be $O(1)$.

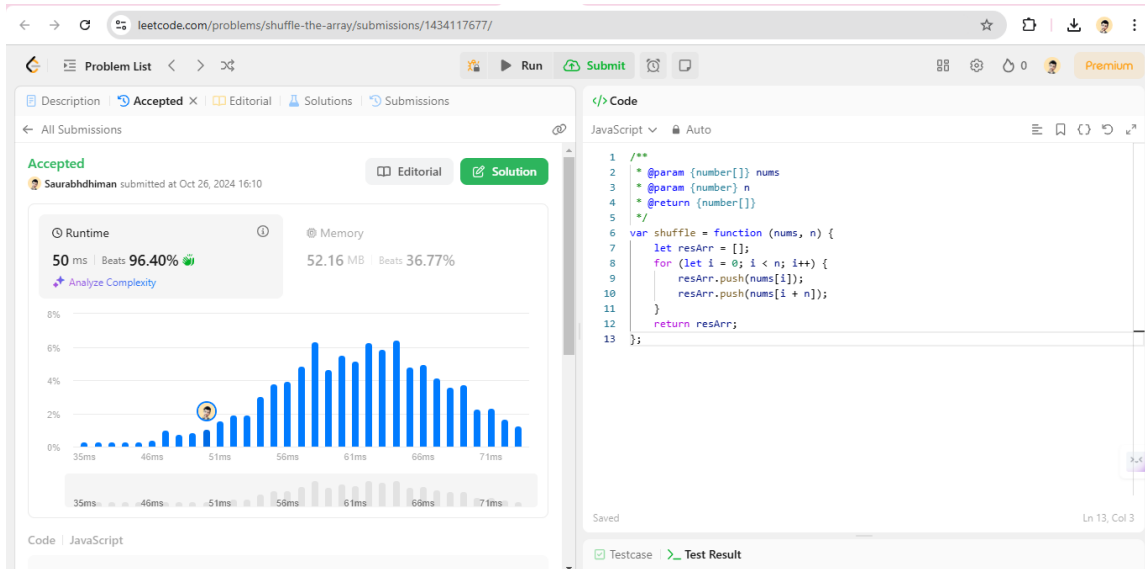
Code Explanation -

1. Taking a counter variable which will count the pair.
2. using nested for loop such that 1st loop iterate through nums arra and second loop also iterates through nums array .
3. Adding if condition such that value of nums at index i == value of inex j so increase the counter.
4. Return the counter.

QnO.- 1470

Link - <https://leetcode.com/problems/shuffle-the-array/description/>

solution link - <https://leetcode.com/problems/shuffle-the-array/submissions/1434117677/>



Description -

Time Complexity-

As we are using one for loop so $O(n)$.

Space Complexity -

USing empty arr which will take size of array so

$O(n)$.

Code Explanation-

1. Defined a empty array which will take result of suffeled array.
2. For loop which will iterates upto n (as we need to store values such that we have to iterate only hal of array).
3. Now when loop run for first time at 0 index it will push 0 hen $0+n$ at 1inde and so on upto n.
4. Return result array.