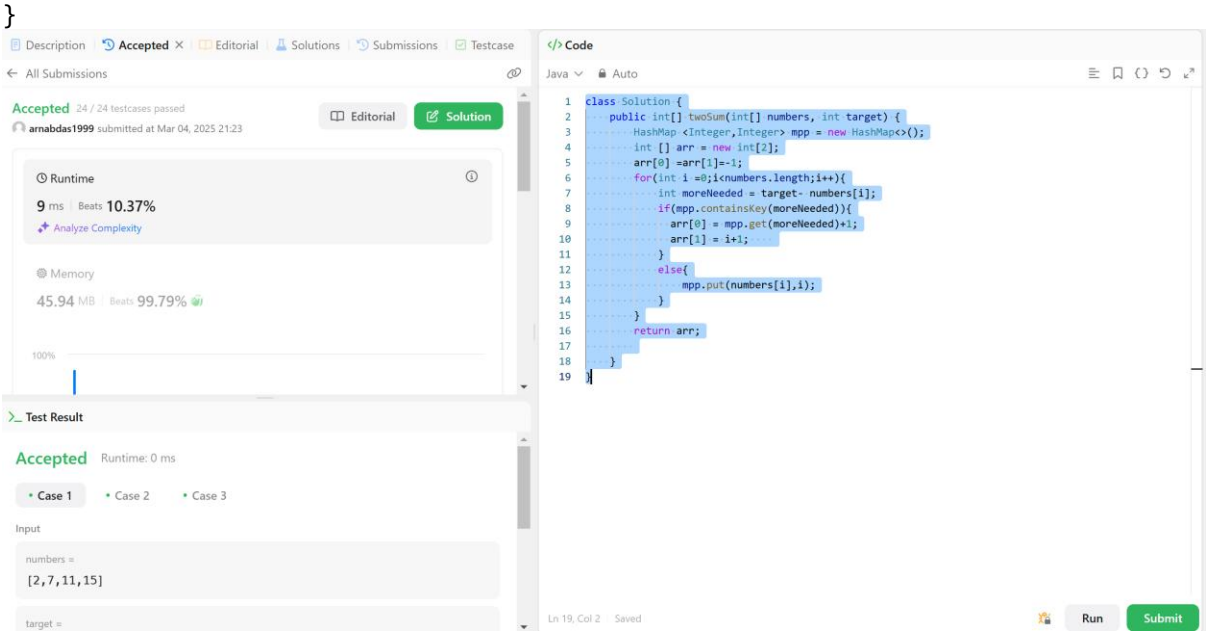
Week 1 – assignment

Question-1 (Two Sum)

```
class Solution {
    public int[] twoSum(int[] numbers, int target) {
        HashMap <Integer,Integer> mpp = new HashMap<>();
        int [] arr = new int[2];
        arr[0] =arr[1]=-1;
        for(int i =0;i<numbers.length;i++){
            int moreNeeded = target- numbers[i];
            if(mpp.containsKey(moreNeeded)){
              arr[0] = mpp.get(moreNeeded)+1;
              arr[1] = i+1;
            }
            else{
                mpp.put(numbers[i],i);
            }
        }
        return arr;

    }
}
```

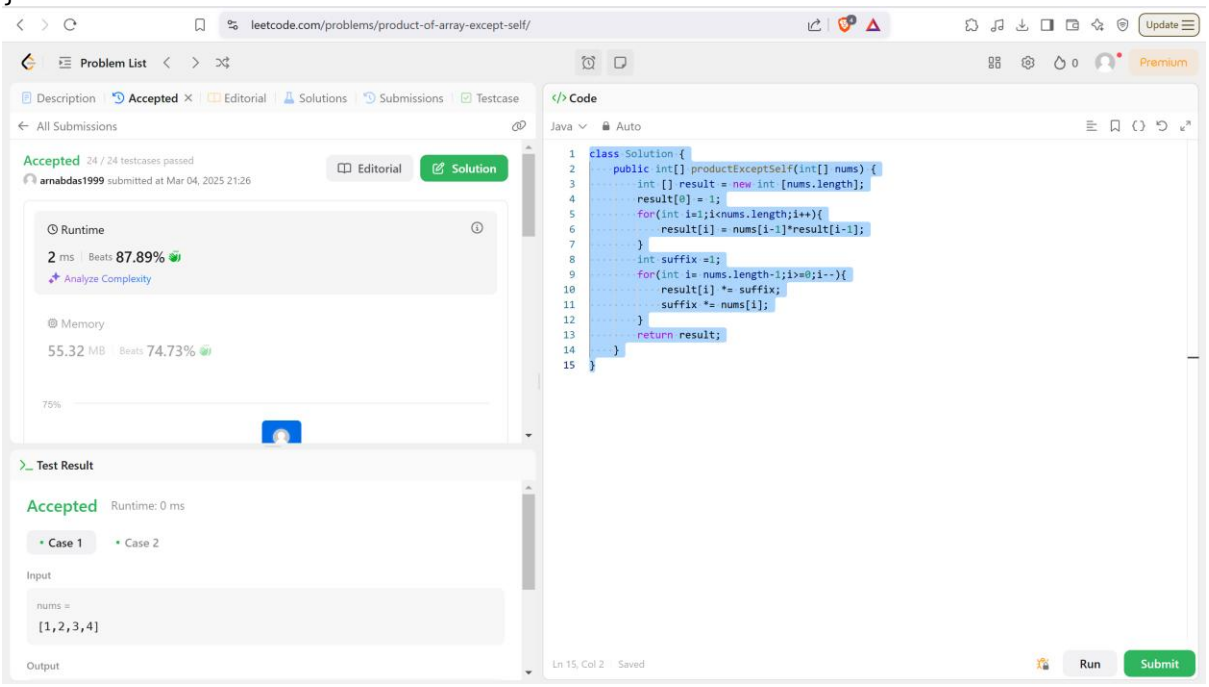


Question 2

```
class Solution {

    public int[] productExceptSelf(int[] nums) {
        int [] result = new int [nums.length];
        result[0] = 1;
        for(int i=1;i<nums.length;i++){
```

```
            result[i] = nums[i-1]*result[i-1];
        }
        int suffix =1;
        for(int i= nums.length-1;i>=0;i--){
            result[i] *= suffix;
            suffix *= nums[i];
        }
        return result;
    }
}
```



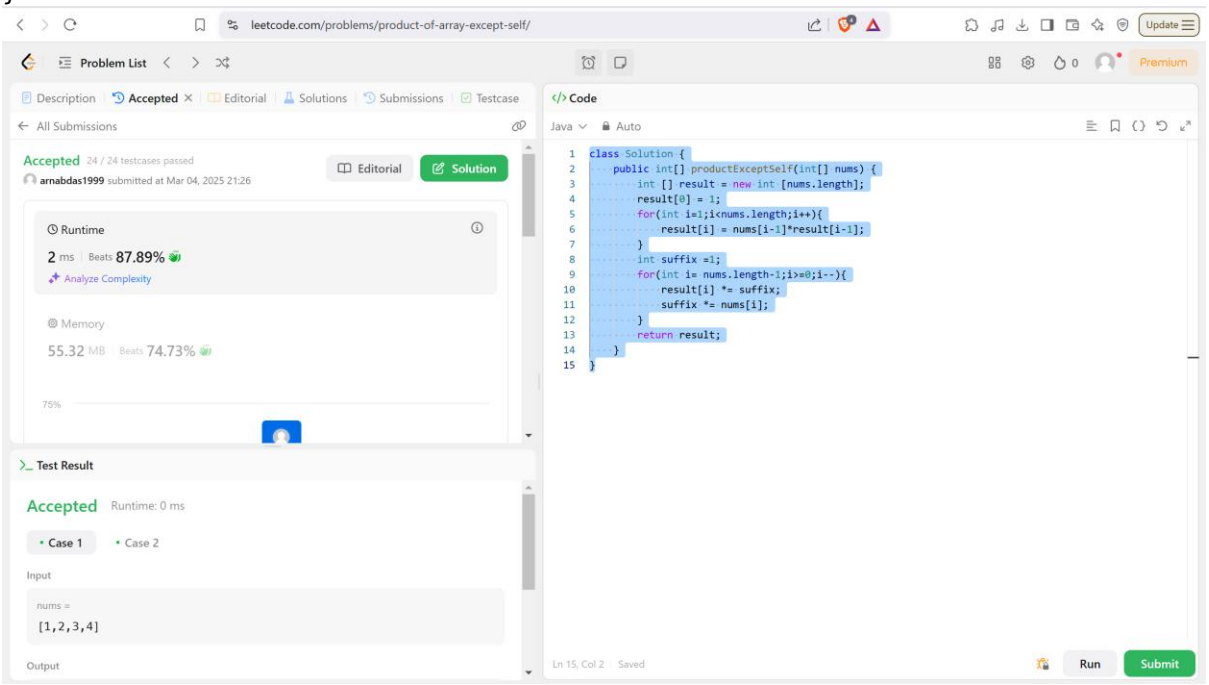
Question 3

```
class Solution {

    public void sortColors(int[] nums) {
        int low=0,mid=0,high=nums.length-1;
        while(mid<=high){
            if(nums[mid] == 0){
                int temp = nums[low];
                nums[low]=nums[mid];
                nums[mid] = temp;
                low++;
                mid++;
            }
            else if(nums[mid]==1){
                mid++;
            }
            else {
                int temp = nums[mid];
                nums[mid]=nums[high];
                nums[high] = temp;
```

```
                high--;
            }
        }

    }
}
```


leetcode.com/problems/product-of-array-except-self/
Problem List
Premium
Description
Accepted
Editorial
Solutions
Submissions
Testcase
All Submissions
Accepted 24 / 24 testcases passed
arnabdas1999 submitted at Mar 04, 2025 21:26
Editorial
Solution
Runtime
2 ms | Beats 87.89%
Analyze Complexity
Memory
55.32 MB | Beats 74.73%
75%
Test Result
Accepted Runtime: 0 ms
Case 1
Case 2
Input
nums =
[1,2,3,4]
Output
Code
Java
Auto
class Solution {
public int[] productExceptSelf(int[] nums) {
int [] result = new int [nums.length];
result[0] = 1;
for(int i=1;i<nums.length;i++){
result[i] = nums[i-1]*result[i-1];
}
int suffix =1;
for(int i= nums.length-1;i>=0;i--){
result[i] *= suffix;
suffix *= nums[i];
}
return result;
}
}
Ln 15, Col 2
Saved
Run
Submit