Experiment No. - 1

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Branch: BE-CSE(LEET)
Section/Group:20BCS-ST-801/B
Semester: 6th
Date of Performance: 14/02/2023
Subject Name: Competitive coding - II
Subject Code: 20CSP-351

1. **Aim/Overview of the practical:**

   Q1. Jump Game II

   https://leetcode.com/problems/jump-game-ii/

2. **Apparatus / Simulator Used:**

1. Windows 7 or above
2. Google Chrome

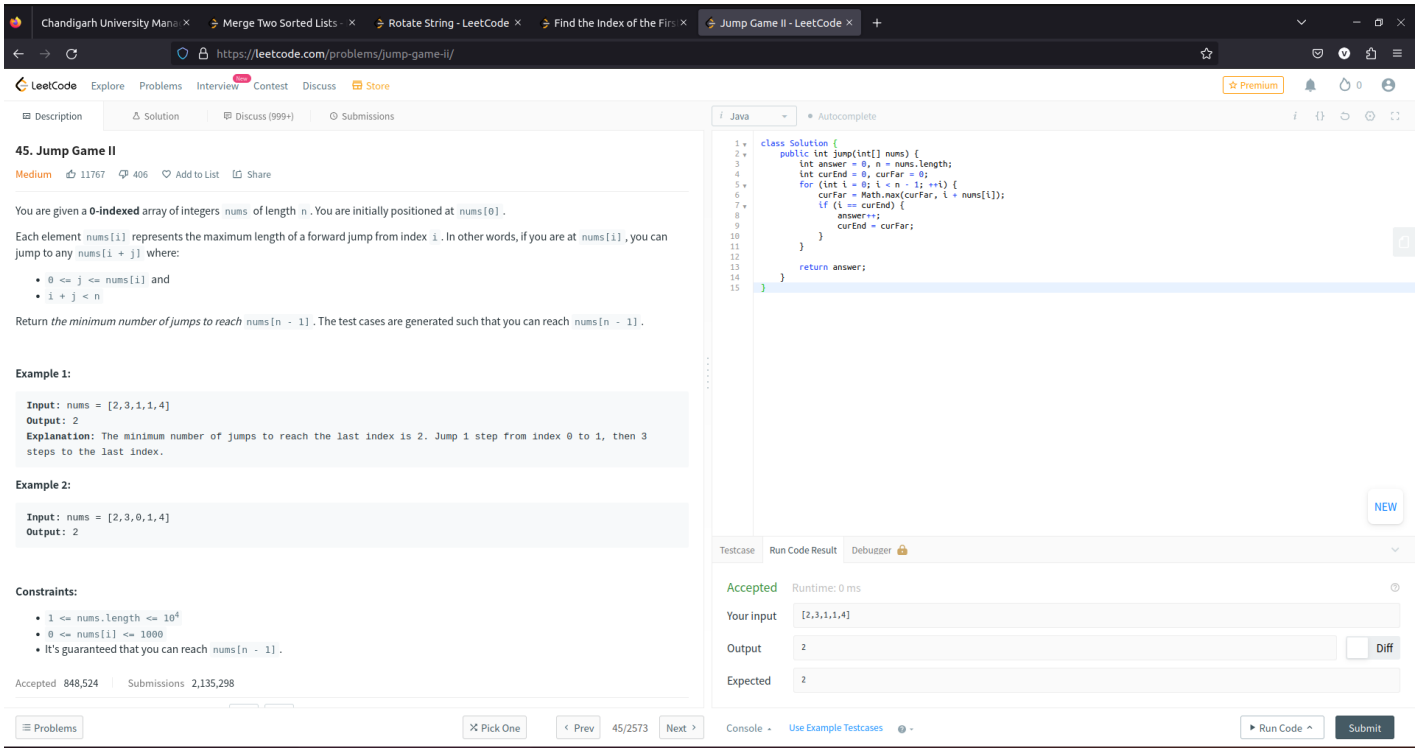
3. **Objective:**
   a. To understand the concept of Array and Jump Concept
   b. To implement the concept of Array Implementation.

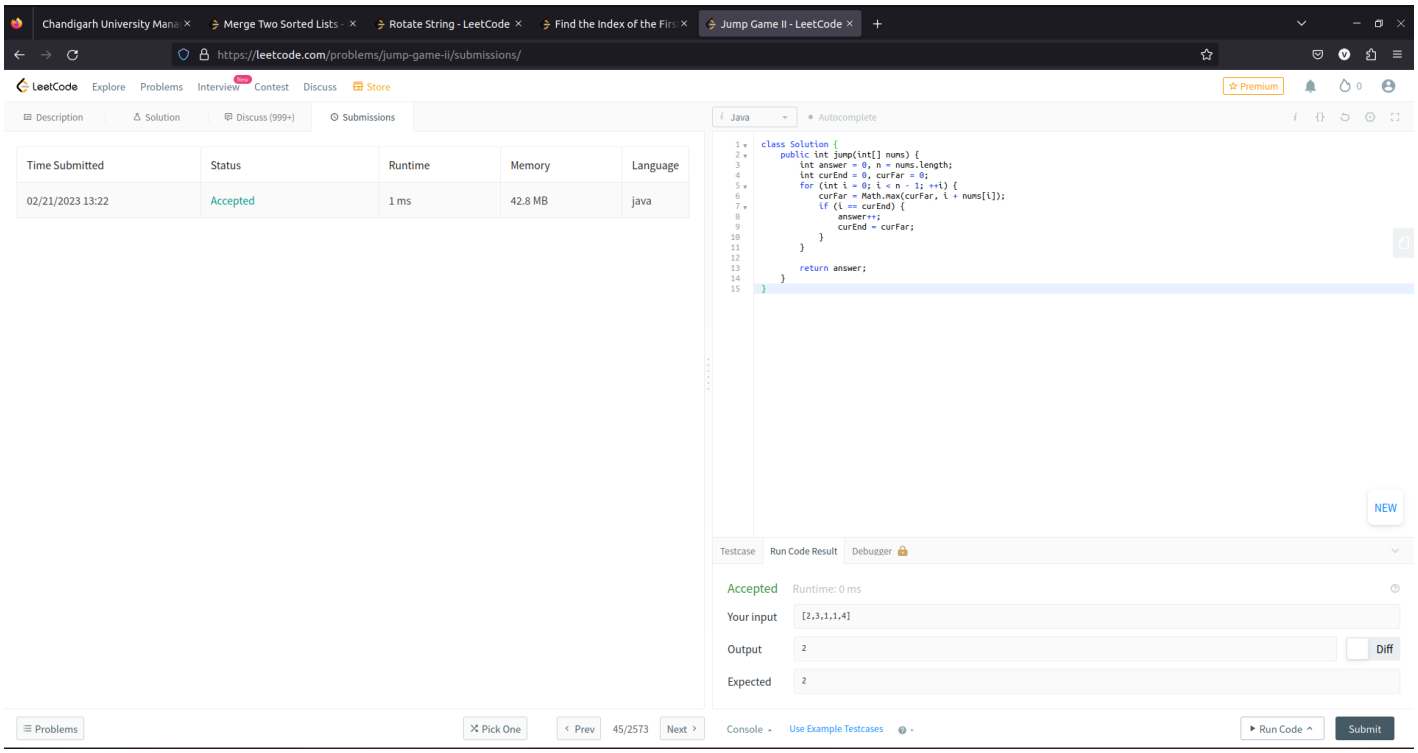
4. **Code:**

```
class Solution {
    public int jump(int[] nums) {
        int answer = 0, n = nums.length;
        int curEnd = 0, curFar = 0;
        for (int i = 0; i < n - 1; ++i) {
            curFar = Math.max(curFar, i + nums[i]);
            if (i == curEnd) {
                answer++;
                curEnd = curFar;
            }
        }

        return answer;
    }
}
```

5. Result/Output/Writing Summary:





1. **Aim/Overview of the practical:**

   Q2. Merge Two Sorted List

   https://leetcode.com/problems/remove-duplicates-from-sorted-list-ii/

2. **Apparatus / Simulator Used:**
   1. Windows 7 or above
   2. Google Chrome

3. **Objective:**
   - To understand the concept of List and Node
   - To implement the concept of Remove duplicates from the list

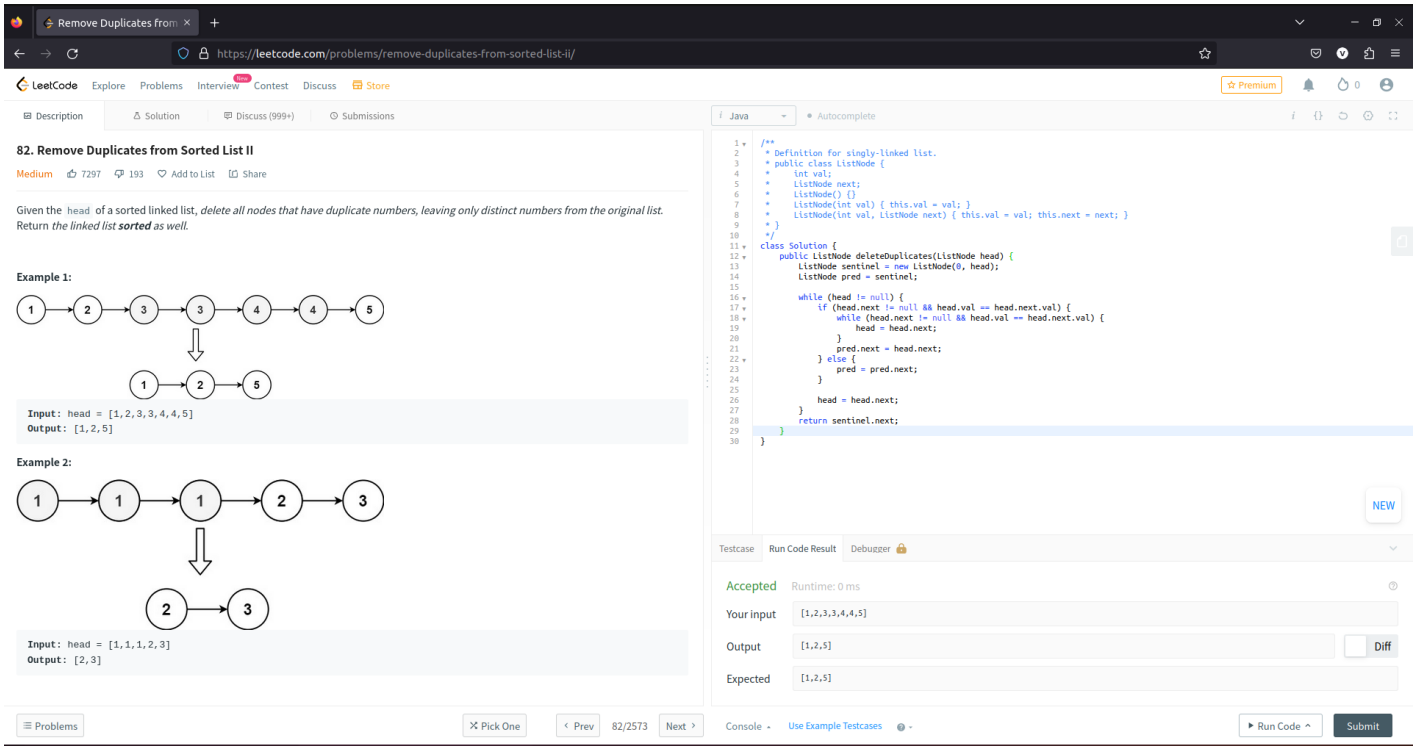
4. **Code:**

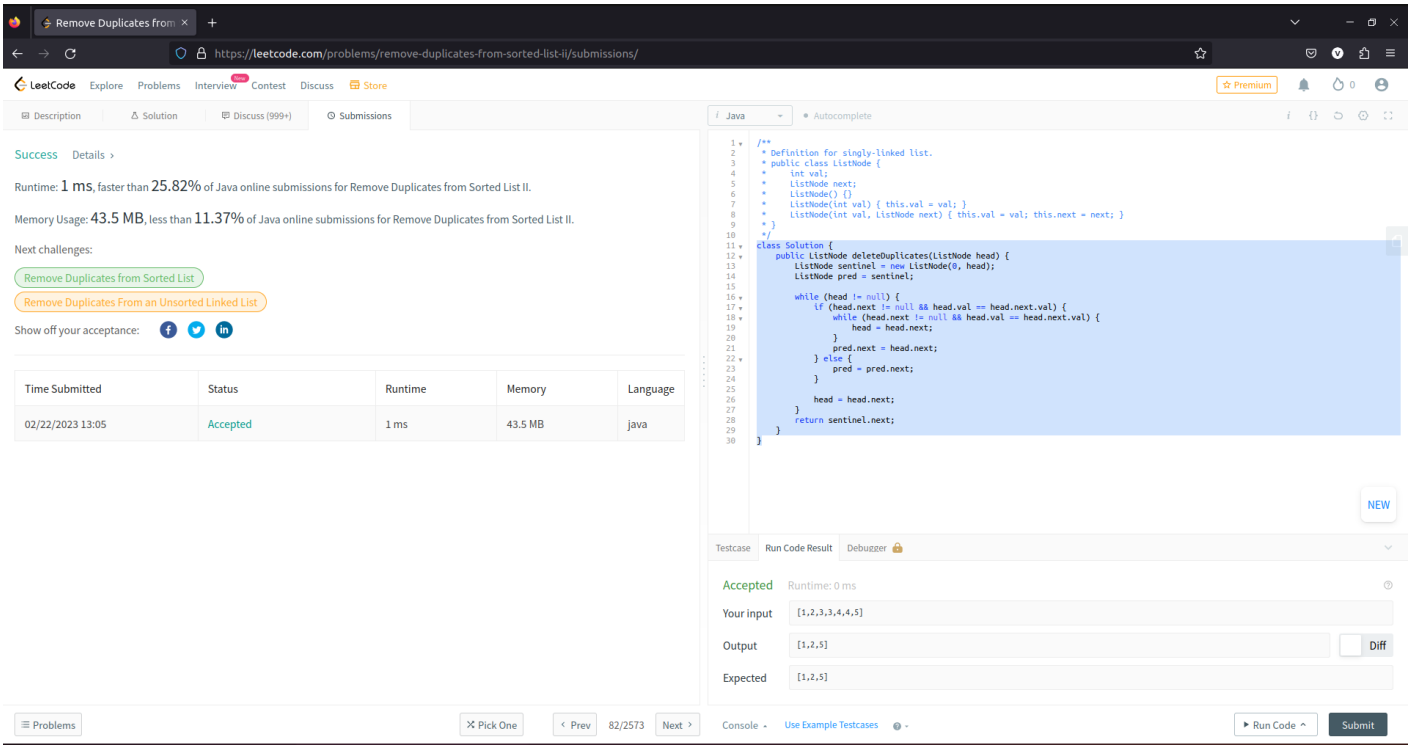
```
class Solution {
    public ListNode deleteDuplicates(ListNode head) {
        ListNode sentinel = new ListNode(0, head);
        ListNode pred = sentinel;

        while (head != null) {
            if (head.next != null && head.val == head.next.val) {
                while (head.next != null && head.val == head.next.val) {
                    head = head.next;
                }
                pred.next = head.next;
            } else {
                pred = pred.next;
            }

            head = head.next;
        }
        return sentinel.next;
    }
}
```

5. Result/Output/Writing Summary:





Learning outcomes (What I have learnt):

- Learned the concept of LinkedList.
- Learnt about Removing Duplicates from the List.

Evaluation Grid (To be created per the faculty's SOP and Assessment guidelines):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.	Worksheet completion including writing learning objectives/Outcomes. (To be submitted at the end of the day).		
2.	Post-Lab Quiz Result.		
3.	Student Engagement in Simulation/Demonstration/Performance and Controls/Pre-Lab Questions.		
	Signature of Faculty (with Date):	Total Marks Obtained:	