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UID: - 20BCS3876

SECTION: - DWWC - 43

SUBJECT: - IT SKILLS

SUBMITTED TO :- NATASHA MA'AM

Q1) <https://leetcode.com/problems/insertion-sort-list/>

Program code :-

```
class Solution { public:
    ListNode* insertionSortList(ListNode* head) {
        ListNode* newHead = NULL; //initializing the newHead for our sorted linkedlist
        while(head){
            // Exluding node from the original linked list we will do this one at a time
            ListNode* temp = head;      head = head->next;
            temp->next=NULL;

            //setting the first node of our final linked list      if(newHead == NULL) newHead = temp;
            // if the position of element is at index 0 i.e. at the start (the temp node is the smallest of all the nodes that are currently present in the sorted linked list)      else if(newHead->val >= temp->val){
                temp->next = newHead;      newHead = temp;
            }
            // inserting the node anywhere in the middle or in the end depending upon the value of the temp node;      else{
                ListNode* root = newHead;      {

```


```

        while(root->next){
            if(temp->val > root->val and temp->val <= root-
>next->val){
                temp->next = root->next;          root->next
= temp;          break;
            }
            root = root->next;
        }
        //inserting the temp node at the end          if(root->next==NULL) root-
>next = temp;

    }
}
}
//Our sorted linkedlist    return newHead;
}
};

```

Output :-

 **Accepted**

Next question

• 148. Sort List

More challenges

• 148. Sort List
• 708. Insert into a Sorted Circular Linked List

All statuses

All languages

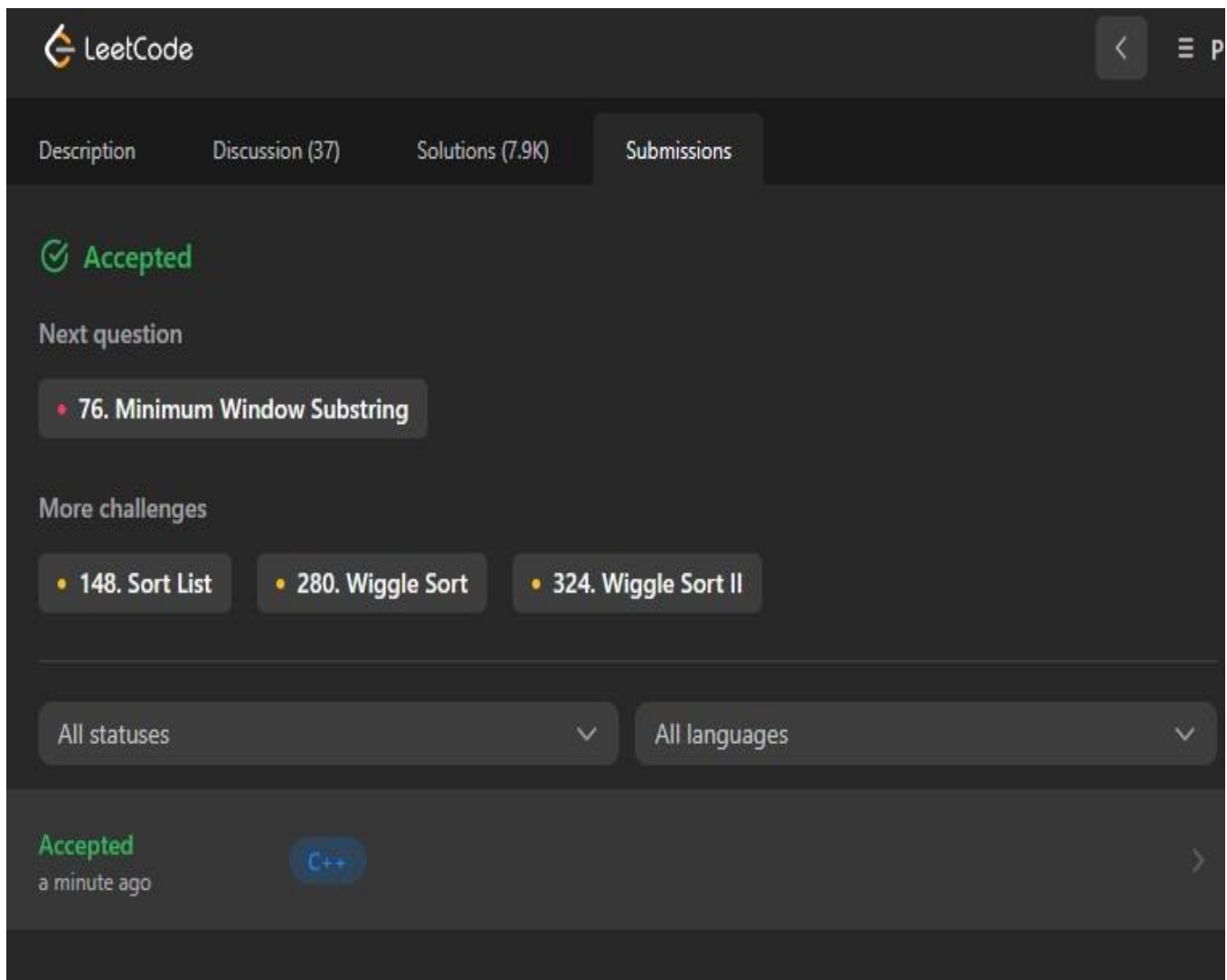
Accepted a minute ago	C++	>
Compile Error 2 minutes ago	C++	>
Accepted 15 minutes ago	C++	>
Accepted 17 minutes ago	C++	>
Accepted 17 minutes ago	C++	>

Q2) <https://leetcode.com/problems/sort-colors/>

Program code :-

```
class Solution {  
public:  
    void sortColors(vector<int>& nums) {  
        sort(nums.begin(),nums.end());  
    }  
};
```

Output :-



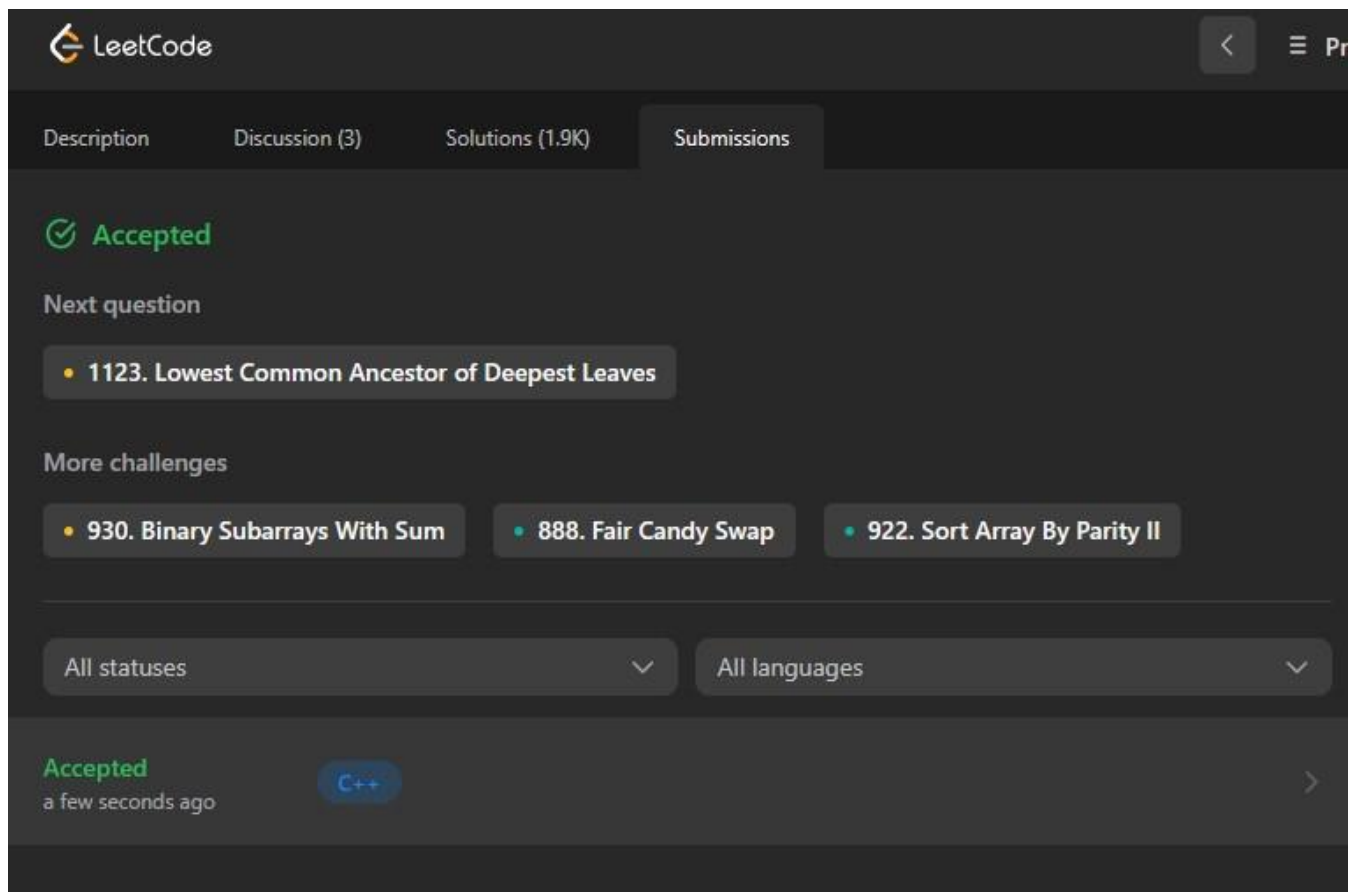
The screenshot displays the LeetCode interface for the 'Sort Colors' problem. The 'Submissions' tab is active, showing a green checkmark and the word 'Accepted'. Below this, the 'Next question' section recommends '76. Minimum Window Substring'. The 'More challenges' section lists three related problems: '148. Sort List', '280. Wiggle Sort', and '324. Wiggle Sort II'. At the bottom, there are two dropdown menus for 'All statuses' and 'All languages'. The final submission is shown as 'Accepted' in green text, with a blue 'C++' language tag and the timestamp 'a minute ago'.

Q3) <https://leetcode.com/problems/relative-sort-array/>

Program code :-

class Solution {	
public:	
vector<int> relativeSortArray(vector<int>& arr1, vector<int>&	
arr2) {	
map<int, int> m;	
for (auto i : arr1) m[i]++;	
int pos = 0;	
for (auto j : arr2) {	
while(m[j]-- > 0) arr1[pos++] = j;	
}	
for (auto it : m) {	
while(it.second-- > 0) arr1[pos++] = it.first;	
}	
return arr1;	
}	
};	

Output :-



Q4) <https://leetcode.com/problems/sort-an-array/>

```
class Solution {
public:
    vector<int> sortArray(vector<int>& nums) {
        priority_queue<int, vector<int>, greater<int>>q;
        for(int i=0; i<nums.size(); i++){
            q.push(nums[i]);
        }
        vector<int>ans;
        while(!q.empty()){
            ans.push_back(q.top());
        }
    }
};
```

```

        q.pop();
    }
    return ans;
}
};

```

Output :-

LeetCode

Description Discussion (10) Solutions (1.8K) Submissions

✓ Accepted

Next question

- 913. Cat and Mouse

More challenges

- 659. Split Array into Consecutive Subsequences
- 1007. Minimum Domino Rotations For Equal Row
- 1877. Minimize Maximum Pair Sum in Array

All statuses All languages

Accepted
a minute ago C++

Q5) <https://www.codechef.com/submit-v2/TSORT?tab=solution>

```
#include <bits/stdc++.h>

using namespace std; int
main() {

    // your code goes here

    int t;    cin>>t;

    vector <int> a(t);

    for(int i = 0; i< t ; i++){

        cin>>a[i];

    }

    sort(a.begin(),a.end());

    for(int x : a)

        cout<<x<<endl;    return

    0;

}
```

Output :-

Status: ✓ Correct Answer

Submission ID: [84477350](#)

Time:
1.58s

Congratulations on solving the problem. Visit our practice section to solve more interesting problems

[View another problem](#) →