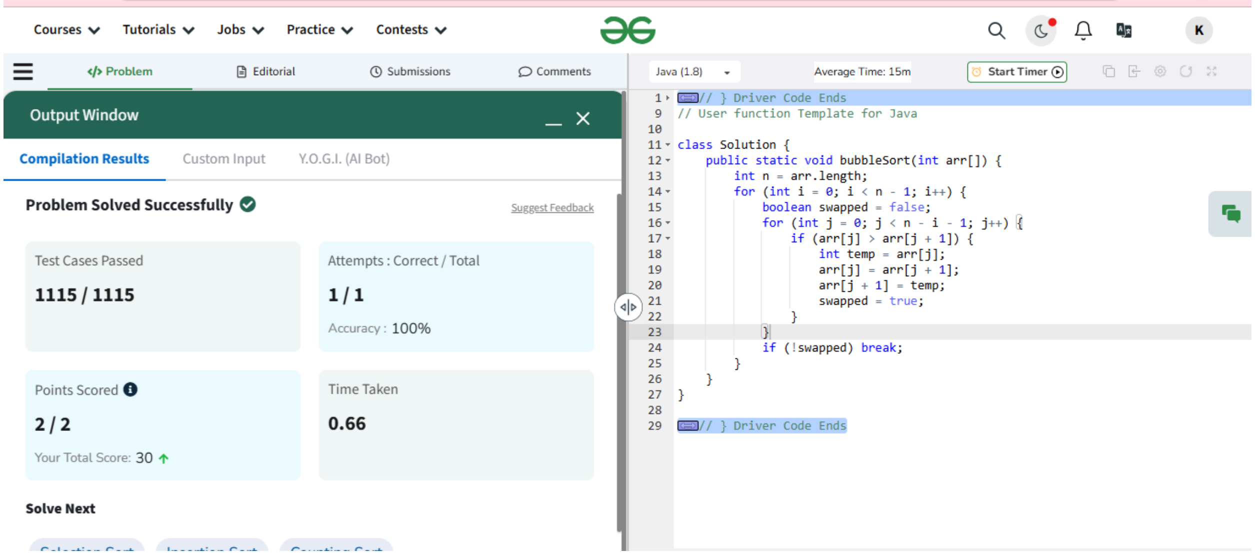
DSA Coding Practice-6

1. Bubble Sort:



Problem Solved Successfully

Test Cases Passed
1115 / 1115

Attempts : Correct / Total
1 / 1
Accuracy : 100%

Points Scored
2 / 2
Your Total Score: 30

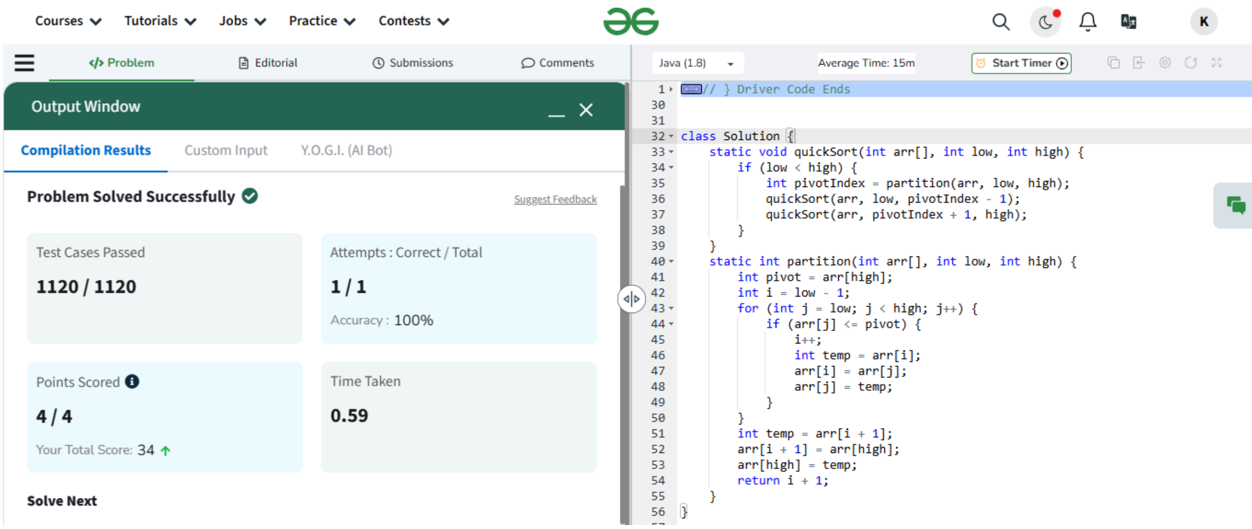
Time Taken
0.66

```java
// } Driver Code Ends
// User function Template for Java

class Solution {
    public static void bubbleSort(int arr[]) {
        int n = arr.length;
        for (int i = 0; i < n - 1; i++) {
            boolean swapped = false;
            for (int j = 0; j < n - i - 1; j++) {
                if (arr[j] > arr[j + 1]) {
                    int temp = arr[j];
                    arr[j] = arr[j + 1];
                    arr[j + 1] = temp;
                    swapped = true;
                }
            }
            if (!swapped) break;
        }
    }
}

// } Driver Code Ends
```

2.Quick Sort:



Problem Solved Successfully

Test Cases Passed
1120 / 1120

Attempts : Correct / Total
1 / 1
Accuracy : 100%

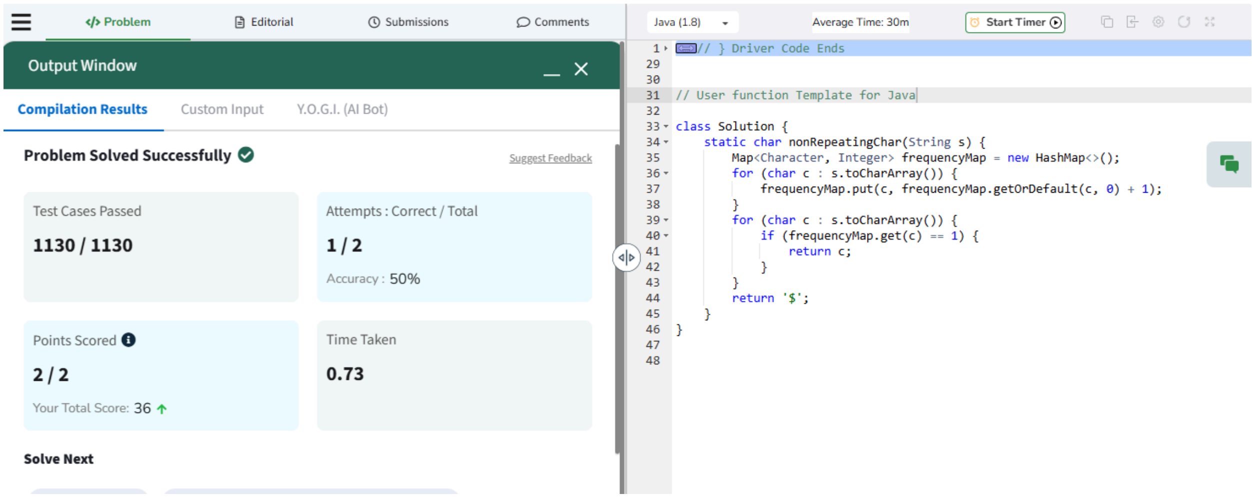
Points Scored
4 / 4
Your Total Score: 34

Time Taken
0.59

```java
// } Driver Code Ends


class Solution {
    static void quickSort(int arr[], int low, int high) {
        if (low < high) {
            int pivotIndex = partition(arr, low, high);
            quickSort(arr, low, pivotIndex - 1);
            quickSort(arr, pivotIndex + 1, high);
        }
    }
    static int partition(int arr[], int low, int high) {
        int pivot = arr[high];
        int i = low - 1;
        for (int j = low; j < high; j++) {
            if (arr[j] <= pivot) {
                i++;
                int temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
        int temp = arr[i + 1];
        arr[i + 1] = arr[high];
        arr[high] = temp;
        return i + 1;
    }
}
```

3.Non Repeating Character:



Problem Solved Successfully ✓

Test Cases Passed
1130 / 1130

Attempts : Correct / Total
1 / 2
Accuracy : 50%

Points Scored
2 / 2
Your Total Score: 36 ↑

Time Taken
0.73

```java
// } Driver Code Ends


// User function Template for Java

class Solution {
    static char nonRepeatingChar(String s) {
        Map<Character, Integer> frequencyMap = new HashMap<>();
        for (char c : s.toCharArray()) {
            frequencyMap.put(c, frequencyMap.getOrDefault(c, 0) + 1);
        }
        for (char c : s.toCharArray()) {
            if (frequencyMap.get(c) == 1) {
                return c;
            }
        }
        return '$';
    }
}
```