



Experiment 3

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Branch: BE CSE

Semester: 5

Subject Name: DAA

UID: 23BCS11354

Section/Group: KRG-2A

Date of Performance: 10/8/2025

Subject Code: 23CSH-301

- 1. Aim:** Given an array of positive integers which may contain duplicate elements, return frequency of each distinct element
- 2. Objective:** To count the number of times each distinct element appears in the array.
- 3. Implementation/Code:**

```
class Solution {
public:
    vector<vector<int>> countFreq(vector<int>& arr) {
        // code here
        unordered_map<int, int> freq;

        for (int x : arr) {
            freq[x]++;
        }

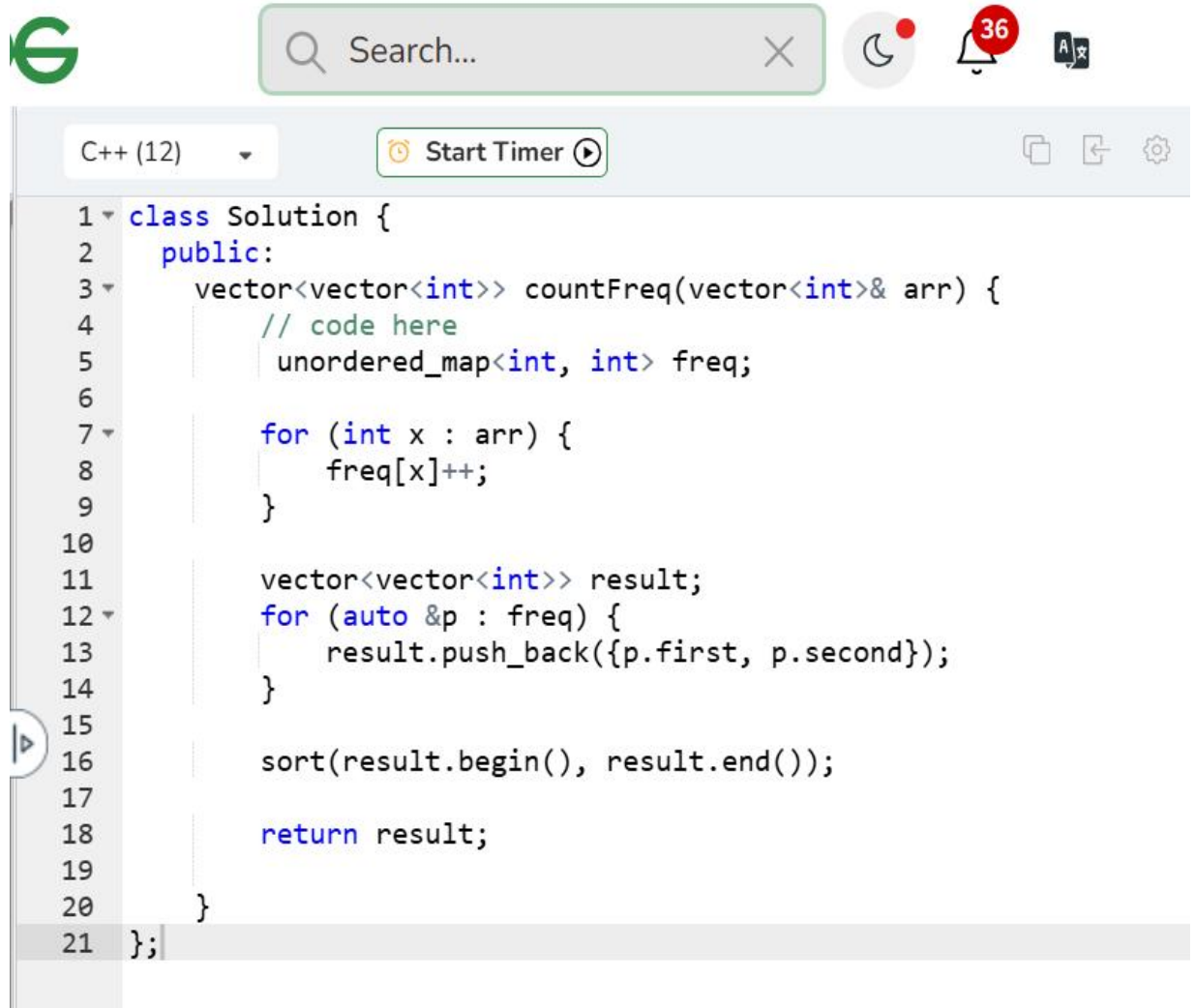
        vector<vector<int>> result;
        for (auto &p : freq) {
            result.push_back({p.first, p.second});
        }

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

        return result;
    }
}
```

};

4. Output



```
1 class Solution {  
2     public:  
3     vector<vector<int>> countFreq(vector<int>& arr) {  
4         // code here  
5         unordered_map<int, int> freq;  
6  
7         for (int x : arr) {  
8             freq[x]++;  
9         }  
10  
11         vector<vector<int>> result;  
12         for (auto &p : freq) {  
13             result.push_back({p.first, p.second});  
14         }  
15  
16         sort(result.begin(), result.end());  
17  
18         return result;  
19     }  
20 }  
21 };
```



Problem Solved Successfully ✓

[Suggest Feedb](#)

Test Cases Passed

1112 / 1112

Attempts : Correct / Total

2 / 2

Accuracy : 100%

Time Taken

0.24

5. Learning Outcome

- 1. Understanding of frequency counting** – Learn how to calculate the occurrence of each element in an array.
- 2. Efficient use of data structures** – Gain hands-on practice with hash maps/dictionaries or arrays to store frequencies.
- 3. Handling duplicates in arrays** – Develop the ability to process arrays containing repeated elements without redundancy.



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