Count Frequency of Elements

<u>Problem</u>

Given an array a[] of size n, our task is to find the frequency of each element in the array.

<u>Example</u>

2	2	2	1	1	4	3	4

In the above array, frequency of elements is

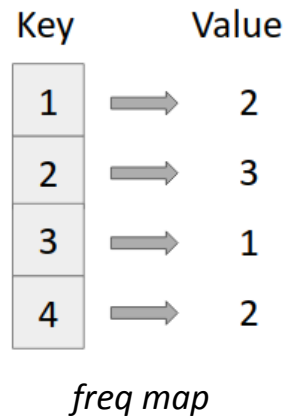| 1	$\Longrightarrow$	2
2	$\Longrightarrow$	3
3	$\Longrightarrow$	1
4	$\Longrightarrow$	2

Answer

<u>Steps</u>

1. Declare a map (say freq) of both keys and value as int.

   map<int,int> freq;

2. Iterate over the elements of the array and in each iteration just do,

   freq[a[i]]++;

Imagination of freq map should be like this in your mind

Key		Value
1	⟹	2
2	⟹	3
3	⟹	1
4	⟹	2

freq map

Code

```cpp
1    #include<bits/stdc++.h>
2    using namespace std;
3
4    int main(){
5        int n;
6        cin >> n;
7
8        vector<int> a(n);
9
10       for(int i=0; i<n; i++) {
11           cin >> a[i];
12       }
13       map<int,int> freq;
14       for(int i=0; i<n; i++) {
15           freq[a[i]]++;
16       }
17       map<int,int> :: iterator it;
18
19       for(it = freq.begin(); it≠freq.end(); it++){
20           cout << it→first <<" "<< it→second << endl;
21       }
22       return 0;
23   }
```

Local: hello

[-] Testcase 1 Failed 2

Input:
8
2 2 2 1 1 4 3 4

Expected Output:

Received Output:
1 2
2 3
3 1
4 2

+ New Testcase

↻ Run All   + New