# **Count Frequency of Elements**

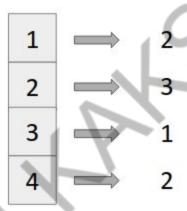
# <u>Problem</u>

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

# Example



In the above array, frequency of elements is



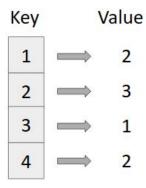
#### Answer

## **Steps**

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

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



freq map

## Code

```
Local: hello
       #include<bits/stdc++.h>
      using namespace std;
  2
                                                                                             [-] Testcase 1 Failed 2
  3
       int main(){
                                                                                             Input:
                                                                                             8
2 2 2 1 1 4 3 4
                                                                                             Expected Output:
  8
           vector<int> a(n);
  9
                                                                                             Received Output:
           for(int i=0; i<n; i++) {
 10
                                                                                             1 2
2 3
3 1
4 2
               cin >> a[i];
 12
           map<int,int> freq;
 13
           for(int i=0; i<n; i++) {
               freq[a[i]]++;
                                                                                             + New Testcase
 16
 17
           map<int,int> :: iterator it;
 18
           for(it = freq.begin(); it≠freq.end(); it++){
  cout << it→first <<" "<< it→second << endl;</pre>
 19
 20
           return 0;
 23
                                                                                              ♂ Run All + New
```