HASHING

1. Count frequency of each element in array

#include<bits/stdc++.h>

using namespace std;

void Frequency(int arr[],int n){

unordered\_map<int,int>map;

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

map[arr[i]]++;

}

for(auto x:map){

cout<<x.first<<" "<<x.second<<" "<<endl;

}

}

int main(){

int arr[] = {1,2,3,4,2};

int n = sizeof(arr)/sizeof(arr[0]);

Frequency(arr,n);

return 0;

}

Output

1 1

2 2

3 1

4 1

1. Count max element and min element in an array

#include<bits/stdc++.h>

using namespace std;

void element(int arr[],int n){

unordered\_map<int,int>mpp;

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

mpp[arr[i]]++;

}

int maxele=0, minele=0;

int maxfreq=0, minfreq=n;

for(auto it:mpp){

int count = it.second;

int element = it.first;

if(count>maxfreq){

maxele = element;

maxfreq = count;

}

if(count<minele){

minele = element;

minfreq = count;

}

}

cout<<"The max freq element is : "<<maxele<<" "<<endl;

cout<<"The min freq element is : "<<minele<<" "<<endl;

}

int main() {

int arr[]={1,2,2,2,2,3};

int n= sizeof(arr)/sizeof(arr[0]);

element(arr,n);

return 0;

}

Output

The max freq element is : 2

The min freq element is : 0