Problem Result

Code : Pair Sum to 0

Send Feedback

Given a random integer array A of size N. Find and print the pair of elements in the array which sum to 0.

Array A can contain duplicate elements.

While printing a pair, print the smaller element first.

That is, if a valid pair is (6, -6) print "-6 6". There is no constraint that out of 5 pairs which have to be printed in 1st line. You can print pairs in any order, just be careful about the order of elements in a pair.

Input format :

Line 1 : Integer N (Array size)
Line 2 : Array elements (separated by space)

Output format :

Line 1 : Pair 1 elements (separated by space)
Line 2 : Pair 2 elements (separated by space)
Line 3 : and so on

Constraints :

0 <= N <= 10^4

Sample Input:

5
2 1 -2 2 3

Sample Output :

-2 2
-2 2

```cpp
#include<unordered_map>
void PairSum(int *input, int n) {

/* Don't write main().
    * the input array is already passed as function argument.
    * Don't need to return anything. Print the desired pairs in the function itself.
    */
    unordered_map<int,int> a;
    for(int i=0;i<n;i++){

        if(a.count(input[i])){
            a[input[i]]++;
        }
        else{
            pair<int,int> p(input[i],1);
        a.insert(p);
    }
    }
    //cout<<a[2] * a[-1*2];
        for(int i=0;i<n;i++){
            if(a[input[i]] && a[-1*input[i]]){

                for(int j=0;j<a[input[i]] * a[-1*input[i]] ; j++){
                    cout<<min(input[i],-1*input[i])<<" "<<max(input[i],-1*input[i])<<endl;
                }
                a.erase(input[i]);
                a.erase(-1*input[i]);
            }
        }

}
```