https://course.acciojob.com/idle?question=51efaeab-1411-48fc-ae36-d2d70cad0edd

- EASY
- Max Score: 30 Points

Range Sum Query

Given an integer array `nums`, handle multiple queries of the following type:

Calculate the sum of the elements of `nums` between indices `left` and `right` inclusive where `left <= right`.

Input Format

Input consists of 4 lines.

First line contains an integer `n`.

Next line contains `n` spaced integers that denote the array

Next line contains integer `m` which is the number of queries for to calculate range sum.

Next `m` lines contains 2 integers each which denotes `left` and `right`.

Example 1

Input

```
6
-2 0 3 -5 2 -1
3
0 2
2 5
0 5
```

Output

```
1 -1 -3
```

Explanation

NumArray numArray = new NumArray([-2, 0, 3, -5, 2, -1]);

numArray.sumRange(0, 2); // return (-2) + 0 + 3 = 1

numArray.sumRange(2, 5); // return 3 + (-5) + 2 + (-1) = -1

numArray.sumRange(0, 5); // return (-2) + 0 + 3 + (-5) + 2 + (-1) = -3

Constraints

`1 <= nums.length <= 104`

`-105 <= nums[i] <= 105`

`0 <= left <= right < nums.length`

At most 104 calls will be made to sumRange.

Topic Tags

- Arrays

My code

```
// in java
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
        public static void main (String[] args) throws java.lang.Exception
```

```
    {
        //your code here
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();
        int arr[]=new int[n];//it contain prefix sum
        int sum=0;
        for(int i=0;i<n;i++)
            {
                sum+=s.nextInt();
                arr[i]=sum;
            }
        int k=s.nextInt();
        for(int l=0;l<k;l++)
            {
                int a=s.nextInt();
                int b=s.nextInt();
                if(a==0)
                    System.out.print(arr[b]+" ");
                else
                    System.out.print(arr[b]-arr[a-1]+" ");
            }
    }
}
```