Week 9

Problem 2

Problem Statement:

Given an array of n integers , process the following for each query -

- For each query we are given a range [l,r] ,we need to find the minimum number of operations to make the range a[l]...a[r] equal.
- In one operation we can select any element in array a and increase it by 1 -> a[i]=a[i]+1.
- For each query we use the original given array.

Input:

The first line contains two integers n and q denoting the length of the array and the number of queries.

The second line contains n space separated integers a1 a2 … an, representing the array a.

Each of the next q lines contains 2 integers “L” and “R” ,and for each query you have to return the minimum number of operations to make the subarray a[L] to a[R] equal.

Output:

Print an integer for each query denoting the minimum number of operations.

Constraints:

$1<=n,q<=10^5$
$1<=l<=r<=n$
$1<=a[i]<=10^9$

Sample Testcases:

Input	Output
5 3 1 2 5 4 3 2 4 1 3 1 5	4 7 10