

Range Sum Subarrays



Given an array of integers and a range $[A,B]$, you have to find the number of subarrays whose sum lies in the given range inclusive.

Input Format

First line of input contains T - number of test cases. Its followed by $2T$ lines, the first line of each test case contains N, A, B - size of the array and the range separated by space, the second line contains the elements of the array.

Constraints

30 points

$1 \leq T \leq 100$

$1 \leq N \leq 100$

$-10^6 \leq A \leq B \leq 10^6$

$-10^4 \leq \text{ar}[i] \leq 10^4$

70 points

$1 \leq T \leq 100$

$1 \leq N \leq 1000$

$-10^7 \leq A \leq B \leq 10^7$

$-10^4 \leq \text{ar}[i] \leq 10^4$

Output Format

For each test case, print the number of subarrays whose sum lies in the given range, separated by newline.

Sample Input 0

```
4
3 -10 5
-5 10 -3
4 -10000 1000
929 -4041 -2470 -6445
9 -36116 6820
4605 -626 -3454 -2532 -91 3010 -3557 5552 4055
6 392 5416
-4905 -2388 5352 -3231 4902 -7485
```

Sample Output 0

```
4
8
41
6
```

Explanation 0

Test Case 1:

The subarrays are:

-5 [Sum = -5]

-5 10 [Sum = 5]

-5 10 -3 [Sum = 2]

10 [Sum = 10]

10 -3 [Sum = 7]

-3 [Sum = -3]

Hence, there are 4 subarrays whose sum lie in the range [-10,5]