

# No Idea!



There is an array of  $n$  integers. There are also **2 disjoint sets**,  $A$  and  $B$ , each containing  $m$  integers. You like all the integers in set  $A$  and dislike all the integers in set  $B$ . Your initial happiness is  $0$ . For each  $i$  integer in the array, if  $i \in A$ , you add  $1$  to your happiness. If  $i \in B$ , you add  $-1$  to your happiness. Otherwise, your happiness does not change. Output your final happiness at the end.

**Note:** Since  $A$  and  $B$  are sets, they have no repeated elements. However, the array might contain duplicate elements.

## Constraints

$$1 \leq n \leq 10^5$$

$$1 \leq m \leq 10^5$$

$$1 \leq \text{Any integer in the input} \leq 10^9$$

## Input Format

The first line contains integers  $n$  and  $m$  separated by a space.

The second line contains  $n$  integers, the elements of the array.

The third and fourth lines contain  $m$  integers,  $A$  and  $B$ , respectively.

## Output Format

Output a single integer, your total happiness.

## Sample Input

```
3 2
1 5 3
3 1
5 7
```

## Sample Output

```
1
```

## Explanation

You gain  $1$  unit of happiness for elements  $3$  and  $1$  in set  $A$ . You lose  $1$  unit for  $5$  in set  $B$ . The element  $7$  in set  $B$  does not exist in the array so it is not included in the calculation.

Hence, the total happiness is  $2 - 1 = 1$ .