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 B. For each B integer in the array, if B in B integer in the array, if B integer in the array if B integers. 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 < n < 10^5
```

$$1 < m < 10^5$$

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

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
```

Sample Output

5 7

```
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.