ITMO Academy: pilot course » **Two Pointers Method** » **Step 1** » **Practice**

C. Number of Equal

time limit per test: 1 second
memory limit per test: 256 megabytes

You are given two arrays a and b, sorted in non-decreasing order. Find the number of pairs (i, j) for which $a_i = b_j$.

Input

The first line contains integers n and m, the sizes of the arrays ($1 \leq n, m \leq 10^5$). The second line contains n integers a_i, elements of the first array, the third line contains m integers b_i, elements of the second array ($-10^9 \leq a_i, b_i \leq 10^9$).

Output

Print one number, the answer to the problem.

Example

input	Copy

```
8 7
1 1 3 3 3 5 8 8
1 3 3 4 5 5 5
```

output	Copy

```
11
```