//algoleague

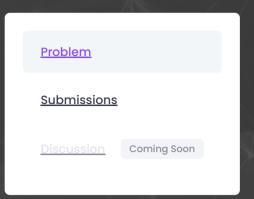## Easy Task

⌂ • Contest List • Algorithm Competition Summer Camp 2023 Foundation Upsolving Contest • Problem List • Easy Task • Problem

Problem

Submissions

Discussion   Coming Soon

Master Fenasal is assigning his student Dabbeli an easy task.

He'll be giving two arrays A and B which are sized n and m respectively. Fenasal wants Dabbeli to find number of i, j pairs where i and j are as following:

$1 \le i \le n$

$1 \le j \le m$

$A_i \le B_j$

Input Format

First line there are two integers n and m

Second line contains elements of array A

Third line contains elements of array B

Output Format

Single integer denoting the number of appropriate i, j pairs

Constraints

$1 \le n, m \le 200000$

$1 \le A_i, B_i \le 10^9$

Sample Input 1 ⬚

```
3 5
3 8 5
2 3 4 5 6
```

Sample Output 1 ⬚

```
6
```

C++ (GCC 9.2.0) ▾   Bright ▾   Memory Limit (kB) : 256000   Time Limit (s) : 1

```cpp
1   #include <bits/stdc++.h>
2
3   using namespace std;
4   #define int long long
5
6   int32_t main() {
7       int n1, n2;
8
9       cin >> n1 >> n2;
10      vector<int> arr1(n1), arr2(n2);
11      for(int i = 0; i < n1; i++)
12          cin >> arr1[i];
13      for(int i = 0; i < n2; i++)
14          cin >> arr2[i];
15
16      sort(arr1.begin(), arr1.end());
17      sort(arr2.begin(), arr2.end());
18
19      int cnt = 0;
20      int i = 0;
```

```cpp
20      int j = 0;
21      for (int i = 0; i < n1; i++) {
22          while (j < n2 && arr1[i] > arr2[j]) {
23              j++;
24          }
25          cnt += n2 - j;
26      }
27
28      cout << cnt << "\n";
29      return 0;
30  }
31
```

Upload File   ☐ Test against custom test case   Run Code   Submit

✓ Sample Test Case 0

Accepted

Input(stdin)

```
1    3 5
2    3 8 5
3    2 3 4 5 6
```

Output(stdin)

```
1    6
2
```

Expected Output

```
1    6
```