

Count Equal Pairs

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Meow is given two arrays, represented by a and b . The elements in both arrays are sorted in non-decreasing order. How many number of pairs (i, j) Meow can find from the two arrays where $a_i = b_j$ ($0 \leq i < n$; $0 \leq j < m$)

Input

The first line contains an integer t ($1 \leq t \leq 100$) - the number of test cases.

The first line of each test case contains two integers n and m , representing the size of the arrays ($1 \leq n, m \leq 10^5$).

The second line of each test case contain n integers a_i , where $(-10^3 \leq a_i \leq 10^3)$.

The third line of each test case contain m integers b_j , where $(-10^3 \leq b_j \leq 10^3)$.

Output

For every test case, print the number of **equal** pairs that can be formed from the two arrays.

Example

standard input	standard output
2	11
8 7	4
1 1 3 3 3 5 8 8	
1 3 3 4 5 5 5	
3 4	
3 4 5	
3 4 4 5	

Note

In second example, there are 4 such pairs – $(3,3), (4,4), (4,4), (5,5)$