

Common Subsequences

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 1024 megabytes

Alice has an array A of length N . Bob also has an array B of length N . Alice can choose two indices, i and j where $i < j$ and output a pair A_i, A_j . Bob will do the same thing and choose his indices independently from Alice.

How many possibilities of indices selected by Alice and Bob will result in them outputting the same thing? Two ways are different if some index of one of the arrays is chosen in one way and not chosen in the other.

Input

The first line contains an integer, N .

The second line contains N integers, representing Alice's array.

The third line contains N integers, representing Bob's array.

Output

Output one integer, the number of ways to choose the four indices.

Scoring

For all test cases, it is guaranteed that:

- $1 \leq N \leq 50$
- $1 \leq A_i, B_i \leq N$

Subtask	Score	Additional constraints
1	20	$N \leq 3$
2	80	—
3	0	Sample test cases

Examples

standard input	standard output
3 3 1 3 3 1 3	3
3 2 2 3 3 1 1	0