Beautiful Pairs



You are given two arrays, \boldsymbol{A} and \boldsymbol{B} , both containing \boldsymbol{N} integers.

A pair of indices (i,j) is *beautiful* if the i^{th} element of array A is equal to the j^{th} element of array B. In other words, pair (i,j) is *beautiful* if and only if A[i] = B[j]. A set containing beautiful pairs is called a *beautiful set*.

A beautiful set is called *pairwise disjoint* if for every pair (l[i], r[i]) belonging to the set there is no repetition of either l[i] or r[i] values. For instance, if A = [10, 11, 12, 5, 14] and B = [8, 9, 11, 11, 5] the beautiful set [(1, 2), (1, 3), (3, 4)] is not pairwise disjoint as there is a repetition of 1, that is l[0][0] = l[1][0].

Your task is to change **exactly 1** element in \boldsymbol{B} so that the size of the pairwise disjoint beautiful set is maximum.

Function Description

Complete the *beautifulPairs* function in the editor below. It should return an integer that represents the maximum number of pairwise disjoint paris that can be formed.

beautifulPairs has the following parameters:

- · A: an array of integers
- B: an array of integers

Input Format

The first line contains a single integer n, the number of elements in A and B.

The second line contains n space-separated integers A[i].

The third line contains n space-separated integers B[i].

Constraints

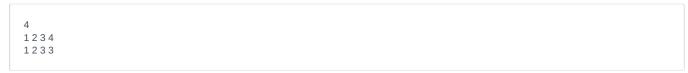
- $1 < n < 10^3$
- $1 \le A[i], B[i] \le 10^3$

Output Format

Determine and print the maximum possible number of pairwise disjoint beautiful pairs.

Note: You must first change 1 element in B, and your choice of element must be optimal.

Sample Input 0



Sample Output 0

4

Explanation 0

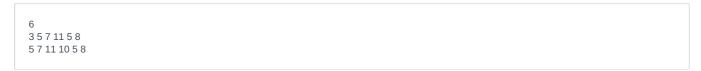
You are given A = [1, 2, 3, 4] and B = [1, 2, 3, 3].

The beautiful set is [(0,0),(1,1),(2,2),(2,3)] and maximum sized pairwise disjoint beautiful set is either [(0,0),(1,1),(2,2)] or [(0,0),(1,1),(2,3)].

We can do better. We change the 3^{rd} element of array B from B to B. Now new B array is: B = [1, 2, 4, 3] and the pairwise disjoint beautiful set is B = [1, 2, 4, 3] and the pairwise disjoint beautiful set is B = [1, 2, 4, 3] and the

Note that we could have also selected index 3 instead of index 2 but it would have yeilded the same result. Any other choice of index is not optimal.

Sample Input 1



Sample Output 1

