

Problem 2 – Bridges

You'll be given two sequences of **natural numbers** – we'll call the sequences **north** and **south**. A sequence will be given on a single line; numbers will be separated by a **single space**.

A bridge can be built between the north sequence and the south sequence by **connecting equal numbers** – 1 with 1, 5 with 5, etc. Your task is to **find the maximum number of bridges that can be built without crossing any bridges**. Print the result as a single number on the console.

Input

- The input data should be read from the console. It will consist of exactly two lines:
- On the first line you'll be given the north sequence of numbers.
- On the second line you'll be given the south sequence of numbers.
- All numbers will be separated from each other by a single space.
- The input data will always be valid and in the format described. There is no need to check it explicitly.

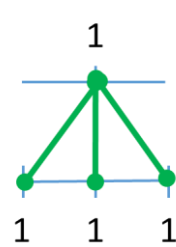
Output

- The output should be printed on the console. It should consist of only one line.
- On the only output line print a single number – the maximum number of non-crossing bridges that can be built between the north and south sequences.

Constraints

- Each sequence will contain between 1 and 50 numbers **with possible duplicates**. Sequences may be of different length.
- The numbers in the sequences will be in the range [0 ... 10].
- Allowed working time for your program: 0.1 seconds. Allowed memory: 16 MB.

Examples

Input	Output	Comments
1 2 3 4 1 2 3 4	4	Each of the four numbers in the north sequence has a counterpart in the south sequence; all four couples can be connected without crossing bridges.
1 2 3 4 4 3 2 1	1	Once any bridge is built, no others can be built without crossing it.
1 1 1 1	3	
2 5 3 3 3 1 8 2 6 7 6 1 2 5 3 4 1 7 8 2 5 6	10	