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B. BerSU Ball

time limit per test: 1 second
 memory limit per test: 256 megabytes
 input: standard input
 output: standard output

The Berland State University is hosting a ballroom dance in celebration of its 100500-th anniversary! n boys and m girls are already busy rehearsing waltz, minuet, polonaise and quadrille moves.

We know that several boy&girl pairs are going to be invited to the ball. However, the partners' dancing skill in each pair must differ by at most one.

For each boy, we know his dancing skills. Similarly, for each girl we know her dancing skills. Write a code that can determine the largest possible number of pairs that can be formed from n boys and m girls.

Input

The first line contains an integer n ($1 \leq n \leq 100$) — the number of boys. The second line contains sequence a_1, a_2, \dots, a_n ($1 \leq a_i \leq 100$), where a_i is the i -th boy's dancing skill.

Similarly, the third line contains an integer m ($1 \leq m \leq 100$) — the number of girls. The fourth line contains sequence b_1, b_2, \dots, b_m ($1 \leq b_j \leq 100$), where b_j is the j -th girl's dancing skill.

Output

Print a single number — the required maximum possible number of pairs.

Examples

input	Copy
4 1 4 6 2 5 5 1 5 7 9	
output	Copy
3	

input	Copy
4 1 2 3 4 4 10 11 12 13	
output	Copy
0	

input	Copy
5 1 1 1 1 1 3 1 2 3	
output	Copy
2	

Codeforces Round #277.5 (Div. 2)

[Finished](#)
[Practice](#)


→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest](#)

→ Clone Contest to Mashup

You can clone this contest to a mashup.

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→ Submit?

Language: GNU G++14 6.4.0 ▼

Choose file: [Choose File](#) No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

[Submit](#)

→ Last submissions

Submission	Time	Verdict
64740545	Nov/12/2019 14:51	Accepted

→ Problem tags

dfs and similar [dp](#) [graph matchings](#)
[greedy](#) [sortings](#) [two pointers](#) *1300
 No tag edit access

→ Contest materials

- [Announcement #1 \(ru\)](#) ✕
- [Announcement #2 \(en\)](#) ✕
- [Tutorial \(en\)](#) ✕