

2037. Minimum Number of Moves to Seat Everyone

Description

There are `n` seats and `n` students in a room. You are given an array `seats` of length `n`, where `seats[i]` is the position of the `ith` seat. You are also given the array `students` of length `n`, where `students[j]` is the position of the `jth` student.

You may perform the following move any number of times:

- Increase or decrease the position of the `ith` student by `1` (i.e., moving the `ith` student from position `x` to `x + 1` or `x - 1`)

Return *the **minimum number of moves** required to move each student to a seat such that no two students are in the same seat.*

Note that there may be **multiple** seats or students in the **same** position at the beginning.

Example 1:

```
Input: seats = [3,1,5], students = [2,7,4]
Output: 4
Explanation: The students are moved as follows:
- The first student is moved from from position 2 to position 1 using 1 move.
- The second student is moved from from position 7 to position 5 using 2 moves.
- The third student is moved from from position 4 to position 3 using 1 move.
In total, 1 + 2 + 1 = 4 moves were used.
```

Example 2:

```
Input: seats = [4,1,5,9], students = [1,3,2,6]
Output: 7
Explanation: The students are moved as follows:
- The first student is not moved.
- The second student is moved from from position 3 to position 4 using 1 move.
- The third student is moved from from position 2 to position 5 using 3 moves.
- The fourth student is moved from from position 6 to position 9 using 3 moves.
In total, 0 + 1 + 3 + 3 = 7 moves were used.
```

Example 3:

```
Input: seats = [2,2,6,6], students = [1,3,2,6]
Output: 4
Explanation: Note that there are two seats at position 2 and two seats at position 6.
The students are moved as follows:
- The first student is moved from from position 1 to position 2 using 1 move.
- The second student is moved from from position 3 to position 6 using 3 moves.
- The third student is not moved.
- The fourth student is not moved.
In total, 1 + 3 + 0 + 0 = 4 moves were used.
```

Constraints:

- `n == seats.length == students.length`
- `1 <= n <= 100`
- `1 <= seats[i], students[j] <= 100`

