

5885. Minimum Number of Moves to Seat Everyone

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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  $i^{\text{th}}$  seat. You are also given the array `students` of length  $n$ , where `students[j]` is the position of the  $j^{\text{th}}$  student.

You may perform the following move any number of times:

- Increase or decrease the position of the  $i^{\text{th}}$  student by 1 (i.e., moving the  $i^{\text{th}}$  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.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

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:** 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:

- $n == \text{seats.length} == \text{students.length}$
- $1 \leq n \leq 100$
- $1 \leq \text{seats}[i], \text{students}[j] \leq 100$

```
1 const stin = (a) => a.sort((x, y) => x - y);
2
3 const minMovesToSeat = (a, b) => {
4     stin(a);
5     stin(b);
6     // pr(a)
7     // pr(b);
8     let n = a.length, res = 0;
9     for (let i = 0; i < n; i++) {
10         res += Math.abs(a[i] - b[i]);
11     }
12     return res;
13 };
```

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