

170. Two Sum III - Data structure design Premium

Easy

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Design a data structure that accepts a stream of integers and checks if it has a pair of integers that sum up to a particular value.

Implement the `TwoSum` class:

- `TwoSum()` Initializes the `TwoSum` object, with an empty array initially.
- `void add(int number)` Adds `number` to the data structure.
- `boolean find(int value)` Returns `true` if there exists any pair of numbers whose sum is equal to `value`, otherwise, it returns `false`.

Example 1:

Input

```
["TwoSum", "add", "add", "add", "find", "find"]  
[[], [1], [3], [5], [4], [7]]
```

Output

```
[null, null, null, null, true, false]
```

Explanation

```
TwoSum twoSum = new TwoSum();  
twoSum.add(1);    // [] --> [1]  
twoSum.add(3);    // [1] --> [1,3]  
twoSum.add(5);    // [1,3] --> [1,3,5]  
twoSum.find(4);   // 1 + 3 = 4, return true  
twoSum.find(7);   // No two integers sum up to 7, return false
```

Constraints:

- $-10^5 \leq \text{number} \leq 10^5$
- $-2^{31} \leq \text{value} \leq 2^{31} - 1$
- At most 10^4 calls will be made to `add` and `find`.

Seen this question in a real interview before? 1/5

Yes

No

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