6245. Find the Pivot Integer

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User Accepted:	2562
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Total Accepted:	2569
Total Submissions:	2741
Difficulty:	Easy

Given a positive integer `n`, find the **pivot integer** `x` such that:

- The sum of all elements between `1` and `x` inclusively equals the sum of all elements between `x` and `n` inclusively.

Return *the pivot integer* `x`. If no such integer exists, return `-1`. It is guaranteed that there will be at most one pivot index for the given input.

Example 1:

```
Input: n = 8
Output: 6
Explanation: 6 is the pivot integer since: 1 + 2 + 3 + 4 + 5 + 6 = 6 + 7 + 8 = 21.
```

Example 2:

```
Input: n = 1
Output: 1
Explanation: 1 is the pivot integer since: 1 = 1.
```

Example 3:

```
Input: n = 4
Output: -1
Explanation: It can be proved that no such integer exist.
```

Constraints:

- `1 <= n <= 1000`

JavaScript

```javascript
const sumOfRange = (l, r) => (l + r) * (r - l + 1) / 2;

const pivotInteger = (n) => {
    for (let x = 1; x <= n; x++) {
        if (sumOfRange(1, x) == sumOfRange(x, n)) return x;
    }
    return -1;
};
```

Custom Testcase Use Example Testcases

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