

Equilibrium Point

Difficulty: Easy

Accuracy: 28.13%

Submissions: 623K+

Points: 2

Given an array of integers `arr[]`, the task is to find the first **equilibrium point** in the array.

The equilibrium point in an array is an index (0-based indexing) such that the sum of all elements before that index is the same as the sum of elements after it. Return -1 if no such point exists.

Examples:

Input: `arr[] = [1, 2, 0, 3]`**Output:** 2**Explanation:** The sum of left of index 2 is $1 + 2 = 3$ and sum on right of index 2 is 3.**Input:** `arr[] = [1, 1, 1, 1]`**Output:** -1**Explanation:** There is no equilibrium index in the array.**Input:** `arr[] = [-7, 1, 5, 2, -4, 3, 0]`

1 // } Driver Code Ends

```
39 class Solution {
40     public static int findEquilibrium(int arr[]) {
41         int rightSum = 0;
42         for (int i = 0; i < arr.length; i++) {
43             rightSum += arr[i];
44         }
45         int leftSum = 0;
46         for (int i = 0; i < arr.length; i++) {
47             rightSum -= arr[i];
48             if (leftSum == rightSum) {
49                 return i;
50             }
51             leftSum += arr[i];
52         }
53         return -1;
54     }
55 }
56
```

[Custom Input](#)

Compile & Run

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