

<https://course.acciojob.com/idle?question=c4eb459b-ea8e-4c06-a898-5d87646be90e>

● EASY

● Max Score: 30 Points

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## Find Pivot Index

Given an array of integers `nums`, calculate the pivot index of this array.

The pivot index is the index where the sum of all the numbers strictly to the left of the index is equal to the sum of all the numbers strictly to the index's right.

If the index is on the left edge of the array, then the left sum is 0 because there are no elements to the left. This also applies to the right edge of the array.

Return the leftmost pivot index. If no such index exists, return -1.

## Input Format

Input consists of two lines.

First line contains an integer  $n$  which is the number of elements in `nums` that are given.

Next line contains  $n$  spaced integers which represents the elements in the array.

## Output Format

Return the leftmost pivot index. If no such index exists, return -1.

### Example 1

Input

```
6
1 7 3 6 5 6
```

Output

```
3
```

Explanation

The pivot index is 3. Left sum =  $\text{nums}[0] + \text{nums}[1] + \text{nums}[2] = 1 + 7 + 3 = 11$  Right sum =  $\text{nums}[4] + \text{nums}[5] = 5 + 6 = 11$

### Example 2

Input

```
3
1 2 3
```

Output

-1

Explanation

There is no index that satisfies the conditions in the problem statement.

## Example 3

Input

3  
2 1 -1

Output

0

Explanation

The pivot index is 0. Left sum = 0 (no elements to the left of index 0) Right sum =  $\text{nums}[1] + \text{nums}[2] = 1 + -1 = 0$

## Constraints

$1 \leq n \leq 10^4$

$-1000 \leq \text{nums}[i] \leq 1000$

### Topic Tags

- Prefix Sum
- Arrays

# My code

```
// n java
import java.util.*;

class Solution {
    public int pivotIndex(int[] nums) {
        //Write code here
        int n=nums.length;
        int sum=0;
        for(int i=0;i<n;i++)
            sum=sum+nums[i];
        int ls=0;//left sum
        for(int i=0;i<n;i++)
        {
            sum=sum-nums[i];
            if(ls==sum)
                return i;
            ls=ls+nums[i];
        }
        return -1;
    }
}

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n;
        n = sc.nextInt();
```

```
int arr[] = new int[n];  
for (int i = 0; i < n; i++)  
    arr[i] = sc.nextInt();  
Solution Obj = new Solution();  
int result = Obj.pivotIndex(arr);  
System.out.println(result);  
sc.close();  
}  
}
```