

TASK

Given the array of integers of size n , $[1, 2, 3, 4 \dots, n]$, write a function that finds the index of the element which divides the array into two subarrays with the same sum.

For example, for the array $p = [5, 3, 9, 8]$ the condition is satisfied by element 9 with index 2, since that is the element that splits into two subarrays $[5, 3]$ and $[8]$, whose sums are 8.

```
Input: [5,3,9,8]
```

```
Output: 2
```

```
sum([5,3]) == 8
```

```
sum([8]) == 8
```

ASSIGNMENT:

Implement a function that returns the index of an array element that satisfies the above condition.

PARAMETERS:

ENTRY:

first line - n - number of elements in the sequence

second line - p - array of elements of size n , separated by space

EXIT:

x - the index of the element that satisfies the condition, or -1 if none found

EXAMPLE 1.

input :

6

3 2 1 1 3 3

output :

3

EXAMPLE 2.

input:

4

3 17 2 1

output:

1