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ROZ

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ROZ

DETAILS

Name

B SUSHMITA

Roll Number

3BR23CA021

EXPERIMENT

Title

ANT ON RAIL

Description

There is a ant on your balcony. It wants to leave the rail so sometimes it moves right and sometimes it moves left until it gets exhausted. Given an integer array A of size N which consists of integer 1 and -1 only representing ant's moves.

Where 1 means ant moved unit distance towards the right side and -1 means it moved unit distance towards the left . Your task is to find and return the integer value representing how many times the ant reaches back to original starting position.

Note:

- Assume 1-based indexing
- Assume that the railing extends infinitely on the either sides

Input Format:

input1: An integer value N representing the number of moves made by the ant.

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input2: An integer array A consisting of the ant's moves towards either side

Sample Input

1 -1 1 -1 1

Sample Output

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3BR23CA021 3BR23CA021 3BR2

9/28/24, 2:39 AM 3BR23CA021-Ant on Rail

Source Code:

```
def count_returns_to_start(N,A):
    current_position = 0
    return_count = 0
    for move in A:
        current_position += move
        if current_position == 0:
            return_count += 1
    return return_count
N=int(input())
A=list(map(int,input().split()))
result=count_returns_to_start(N,A)
print(result)
```

RESULT

5 / 5 Test Cases Passed | 100 %

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