CEO

1823

3ECEOOT KUB23ECEOOT KUB23ECEOO



## STUDENT REPORT

### **DETAILS**

#### Name

**B YOGESH NAIDU** 

#### Roll Number

KUB23ECE007

#### **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

4007

#### **Input Format:**

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

LUB23ECE001 KUB23ECE001 KUB23E

KUB23ECE001 KUB23ECE001 KUB23ECE0

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

#### Sample Input

5

1003

1 -1 1 -1 1

#### **Sample Output**

# LUB23ECEOOT LUB23ECEOOT LUB23ECEOOT **Source Code:** FUBS3E

NOT KUB23ECEPOT KU UB23ECE001 KUB23ECE001 KUB23EC https://practice.reinprep.com/student/get-report/8507c5d8-7a59-11ef-ae9a-0e411ed3c76b

9/28/24, 9:22 AM KUB23ECE007-Ant on Rail

```
def count_return_to_origin(N,A):
        position=0
        return_count=0
        for move in A:
            position+=move
            if position==0:
                return_count+=1
        return return_count
    N=int(input())
    A=list(map(int,input().strip().split()))[:N]
    print(count_return_to_origin(N,A))
RESULT
 5 / 5 Test Cases Passed | 100 %
```