

### STUDENT REPORT

30

5090

# DETAILS

MEGHANA HIREMATH

## 30983BR **Roll Number**

3BR23CS098

#### **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.

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

#### Sample Input

5

1 -1 1 -1 1

#### **Sample Output**

#### **Source Code:**

```
moves=int(input())
arr=list(map(int,input().split()))
pos=0
count=0
for i in range(moves):
    pos=pos+arr[i]
    if pos==0:
        count+=1
print(count)
```

#### **RESULT**

-3098 3BR

2000

9/26/24, 12:40 PM 3BR23CS098-Ant on Rail

5 / 5 Test Cases Passed | 100 %

1 assed | 100 %