



# STUDENT REPORT

## DETAILS

Name

H M Karthik

Roll Number

22B124ME472-T

## EXPERIMENT

Title

PREFIX-SUFFIX BALANCE

Description

You are given an array A of N integers. The array A can be divided into two parts: the first part consists of the first 'i' elements of A (where i ranges from 1 to N), and the second part consists of the last (N-i) elements of A

Your task is to find and return a new array named result of the same size as A, where each element of result[i] represents the absolute difference between the sum of the elements in the first part of A and the sum of the elements in the second part of A

**Note:** For i= N,N-i=0.So, consider the sum of last N-i integers as 0 in this case

### Input Specifications:

input1: An integer value representing the size of the array A.

input2: An integer array A.

### Output Specification:

Return a new integer array named result of the same size as A, where each element of result[i] represents the absolute difference between the sum of the elements in the first part A and the sum of the elements in the second part of A

### Sample Input:

5  
1 2 3 4 5

### Sample Output:

[13, 9, 3, 5, 15]

Source Code:

```
n=int(input())
l=list(map(int,input().split()))
t=sum(l)
res=[]
lft,rt=0,0
for i in range(0,n):
    lft+=l[i]
    rt=t-lft
    val=abs(lft-rt)
    res.append(val)
print(res)
```

RESULT

5 / 5 Test Cases Passed | 100 %