

Question :

Nanda is a Shopkeeper. He always remembers the amount paid by the last 3 customers. Help nanda to find the sum of amounts paid by the last 3 customers whenever a new customer came to his shop.

Tags :

Queue, Deque, Array

Input Description:

First line consists of Number of Customers

Second line consists of amounts paid by each customers

Output Description :

Amount paid by last 3 customers

Solution :

```
n = int(input())
amts = [int(x) for x in input().split()]
```

```
last_three = []
ans = []
for i in amts:
    last_three.append(i)
    if len(last_three) > 3:
        last_three.pop(0)
    ans.append(sum(last_three))
print(*ans)
```

Test Cases :

Test case 1 :

Input

5

1 2 3 4 5

Output

1 3 6 9 12

Test case 2 :

Input

8

8 4 7 2 4 6 8 2

Output

8 12 19 13 13 12 18 16

Test case 3 :

Input

6

3 5 9 12 43 1

Output

3 8 17 26 64 56

Test case 4 :

Input

15

8 3 3 9 12 45 23 7 3 1 4 88 4 2 3

Output

8 11 14 15 24 66 80 75 33 11 8 93 96 94 9

Test case 5 :

Input

5

5 4 3 2 1

Output

5 9 12 9 6