Logo

STUDENT REPORT

DETAILS

Name

SRINIVAS RAO B

Roll Number

3BR23AI156

EXPERIMENT

Title

CHOCOLATE JAR

Description

You are given an integer array of size N, representing jars of chocolates. Three students A, B, and C respectively, will pick chocolates one by one from each chocolate jar, till the jar is empty, and then repeat the same with the rest of the jars. Your task is to fine and return an integer value representing the total number of chocolates that student A will have, after all the chocolates have been picked from all the jars.

Note: Once a jar is done A will start taking the chocolates from the new jar.

Input Format :

input1: An integer value N representing the number of jars.

input2: An integer array representing the quantity of chocolates in each jar.

Output Format:

Return an integer value representing the total number of chocolates that student A will have, after all the chocolates are picked.

Example:

Input:

3

10 20 30

Output:

21

Explanation:

Jar 1: 10 chocolates -> A-4, B-3,C-3

Jar 2: 20 chocolates -> A-7, B-7, C-6

Jar 3: 30 chocolates -> A-10, B-10,C-10

so A gets a total of 4+7+10=21 chocolates.

Source Code:

```
def total_chocolates_for_A(N, jars):
    total_A = 0  # Initialize total chocolates for A

    for chocolates in jars:
        full_rounds = chocolates // 3  # Full rounds of A, B, C picking
        remaining = chocolates % 3      # Remaining chocolates after full rounds

        # Each full round gives A one chocolate per round
        total_A += full_rounds

        # Add remaining chocolates picked by A
        if remaining > 0:
            total_A += 1  # A picks one from the remainder if available

    return total_A

# Input handling
N = int(input())
jars = list(map(int, input().strip().split()))

# Output the result
print(total_chocolates_for_A(N, jars))
```

RESULT

5 / 5 Test Cases Passed | 100 %