STUDENT REPORT

DETAILS

Name

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Roll Number

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EXPERIMENT

Title

MINIMUM ARRAY SUM

Description

Paul is given an array A of length N. He must perform the following Operations on the array sequentially:

* Choose any two integers from the array and calculate their average.

* If an element is less than the average, update it to 0. However, if the element is greater than or equal to the average, he need not update it.

Your task is to help Paul find and return an integer value, representing the minimum possible sum of all the elements in the array by performing the above operations.

Note: An exact average should be calculated, even if it results in a decimal.

Input Format:

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

input2: An integer array A.

Output Format:

Return an integer value, representing the minimum possible sum of all the elements in the array by

Sample Input

5
1 2 3 4 5

Sample Output

5

Source Code:

```
def min_possible_sum(N, A):
    if N == 0:
        return 0  # If there are no elements, the sum is 0.

    # Sort the array to easily find the two largest elements
    A.sort()

    # If there are less than 2 elements, we can't compute an average from two elements
    if N < 2:
        return sum(A)  # Return the sum of available elements (either one or zero)

    # Calculate the average of the two largest elements
    max1 = A[-1]
    max2 = A[-2]
    average = (max1 + max2) / 2

    # Update the elements based on the average
    for i in range(N):
        if A[i] < average:
            A[i] = 0

    # Return the sum of the updated array
    return sum(A)

# Read inputs
N = int(input().strip())
A = list(map(int, input().strip().split()))

# Calculate and print the result
result = min_possible_sum(N, A)
print(result)
```

RESULT

5 / 5 Test Cases Passed | 100 %