



# STUDENT REPORT

## DETAILS

Name

Teja V

Roll Number

3BR23EE104

## 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_sum_after_operations(N, A):  
    max_element = max(A)  
    average = max_element  
  
    for i in range(N):  
        if A[i] < average:  
            A[i] = 0  
  
    return sum(A)  
  
# Example usage  
if __name__ == "__main__":  
    import sys  
  
    N = int(sys.stdin.readline().strip())  
    A = list(map(int, sys.stdin.readline().strip().split()))  
    result = min_sum_after_operations(N, A)  
    print(result)
```

## RESULT

5 / 5 Test Cases Passed | 100 %