



SIVA S 2024-CSE

S2

**Started on** Wednesday, 8 October 2025, 3:56 PM**State** Finished**Completed on** Wednesday, 8 October 2025, 3:58 PM**Time taken** 1 min 37 secs**Marks** 0.00/1.00**Grade** 0.00 out of 10.00 (0%)

**Question 1** | Incorrect Mark 0.00 out of 1.00

A person needs to eat burgers. Each burger contains a count of calorie. After eating the burger, the person needs to run a distance to burn out his calories.

If he has eaten  $i$  burgers with  $c$  calories each, then he has to run at least  $3^i * c$  kilometers to burn out the calories. For example, if he ate 3

burgers with the count of calorie in the order: [1, 3, 2], the kilometers he needs to run are  $(3^0 * 1) + (3^1 * 3) + (3^2 * 2) = 1 + 9 + 18 = 28$ .

But this is not the minimum, so need to try out other orders of consumption and choose the minimum value. Determine the minimum distance

he needs to run. Note: He can eat burger in any order and use an efficient sorting algorithm. Apply greedy approach to solve the problem.

**Input Format**

First Line contains the number of burgers

Second line contains calories of each burger which is  $n$  space-separate integers

**Output Format**

Print: Minimum number of kilometers needed to run to burn out the calories

**Sample Input**

```
3
5 10 7
```

**Sample Output**

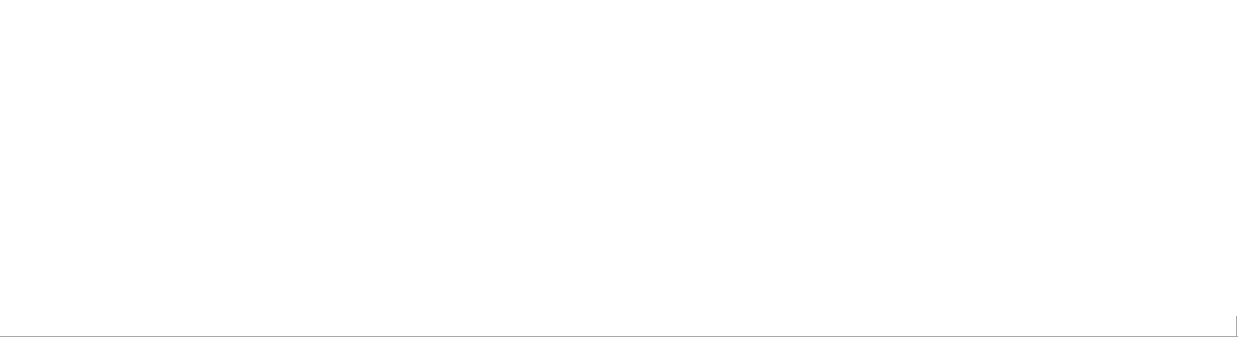
```
76
```

**For example:**

Test	Input	Result
Test Case 1	3 1 3 2	18

**Answer:** (penalty regime: 0 %)

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <math.h>
4
5 // Sort in descending order
6 int compare(const void *a, const void *b) {
7     return (*(int *)b - *(int *)a);
8 }
9
10 int main() {
11     int n;
12     scanf("%d", &n);
13     int calories[n];
14
15     for (int i = 0; i < n; i++) {
16         scanf("%d", &calories[i]);
17     }
18
19     // Sort calories in descending order
20     qsort(calories, n, sizeof(int), compare);
21
22     long long total = 0;
```



	Test	Input	Expected	Got	
✓	Test Case 1	3 1 3 2	18	18	✓
✓	Test Case 3	3 5 10 7	76	76	✓

Your code failed one or more hidden tests.

Your code must pass all tests to earn any marks. Try again.

**Incorrect**

Marks for this submission: 0.00/1.00.

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