

**Started on** Thursday, 28 August 2025, 8:50 PM

**State** Finished

**Completed on** Thursday, 28 August 2025, 8:58 PM

**Time taken** 7 mins 54 secs

**Marks** 1.00/1.00

**Grade** **10.00** out of 10.00 (**100%**)

**Question 1** | Correct Mark 1.00 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 int main(){
3     int n;
4     scanf("%d",&n);
5     int a[n];
6     for(int i=0;i<n;i++){
7         scanf("%d",&a[i]);
8     }
9     int i,j,temp;
10    for(i=1;i<n;i++){
11        temp=a[i];
12        for(j=i;j>0;j--){
13            if(a[j-1]<temp)
14                a[j]=a[j-1];
15            else
16                break;
17        }
18        a[j]=temp;
19    }
20    long long sum=0;
21    long long n=1;
```

```
22 for(int i=0;i<n;i++){
23     sum+=a[i]*p;
24     p=p*n;
25 }
26 printf("%lld",sum);
27 }
```

	Test	Input	Expected	Got	
✓	Test Case 1	3 1 3 2	18	18	✓
✓	Test Case 2	4 7 4 9 6	389	389	✓
✓	Test Case 3	3 5 10 7	76	76	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.