<u>Dashboard</u> / <u>My courses</u> / <u>CS23331-DAA-2023-CSE</u> / <u>Greedy Algorithms</u> / <u>5-G-Product of Array elements-Minimum</u>

Started on	Friday, 23 August 2024, 2:53 PM
State	Finished
Completed on	Friday, 23 August 2024, 2:55 PM
Time taken	1 min 24 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100 %)

```
Question 1
Correct
Mark 1.00 out of 1.00
```

Given two arrays array_One[] and array_Two[] of same size N. We need to first rearrange the arrays such that the sum of the product of pairs(1 element from each) is minimum. That is SUM (A[i] * B[i]) for all i is minimum.

For example:

nput	Result
3	28
ı	
2	
3	
1	
5	
5	
1 2 3 4	20

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
    #include<stdlib.h>
 2
 3
4 v int compareAsc(const void *a, const void *b) {
 5
        return (*(int*)a - *(int*)b);
6
 7
 8 v int compareDesc(const void *a, const void *b) {
9
         return (*(int*)b - *(int*)a);
10
11
12 v int main() {
13
        int n;
14
        scanf("%d", &n);
        int array_One[n];
15
16
        int array_Two[n];
        for(int i = 0; i < n; i++) {
    scanf("%d", &array_One[i]);</pre>
17
18
19
        for(int i = 0; i < n; i++) {
20
             scanf("%d", &array_Two[i]);
21
22
23
        qsort(array_One, n, sizeof(int), compareAsc);
24
        qsort(array_Two, n, sizeof(int), compareDesc);
25
        int sum = 0;
26
        for(int i = 0; i < n; i++) {</pre>
27
             sum += array_One[i] * array_Two[i];
28
        printf("%d\n", sum);
29
30
        return 0;
31
32
33
```

	Input	Expected	Got	
~	3	28	28	~
	1			
	2			
	3			
	4			
	5			
	6			

.,					
	Input	Expected	Got		
~	4	22	22	~	
	7				
	5				
	1				
	2				
	1				
	3				
	4				
	1				
~	5	590	590	~	
	20				
	10				
	30				
	10				
	40				
	8				
	9				
	4				
	3				
	10				

Passed all tests! ✓

Correct
Marks for this submission: 1.00/1.00.

◄ 4-G-Array Sum max problem

Jump to...

1-Number of Zeros in a Given Array ►