<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	Monday, 7 October 2024, 7:49 PM
State	Finished
Completed on	Monday, 7 October 2024, 7:56 PM
Time taken	7 mins 40 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:

Input	Result		
3	28		
1			
2			
3			
4			
5			
6			

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
 2
    #include <stdlib.h>
 3 v int comp1(const void *a, const void *b){
 4
        return (*(int*)a)-(*(int*)b);
 5
 6 v int comp2(const void *a, const void *b){
 7
        return (*(int*)b)-(*(int*)a);
 8
    }
 9
10 v int main(){
11
        int n,sum=0;
12
        scanf("%d",&n);
        int arr1[n],arr2[n];
13
14
        for(int i=0; i<n; i++){</pre>
             scanf("%d", &arr1[i]);
15
16
17
        for(int i=0; i<n; i++){</pre>
             scanf("%d", &arr2[i]);
18
19
20
        qsort(arr1,n,sizeof(int),comp1);
21
        qsort(arr2,n,sizeof(int),comp2);
22 •
        for(int i=0; i<n; i++){</pre>
23
             sum += arr1[i]*arr2[i];
24
25
        printf("%d", sum);
26
        return 0;
27
   }
```

	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 ►