<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	Thursday, 29 August 2024, 11:03 AM
State	Finished
Completed on	Thursday, 29 August 2024, 11:50 AM
Time taken	46 mins 58 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 %)

```
1 #include <stdio.h>
 2 #include <stdlib.h>
 3 ▼
    void swap(int*a,int*b) {
        int temp =*a;
4
5
        *a=*b;
        *b=temp;
6
7
8 void bsa(int arr[], int size) {
9,
        for (int i=0;i<size-1;i++) {</pre>
10
             for (int j=0;j<size-i-1;j++) {</pre>
11
                 if (arr[j]>arr[j+1]) {
12
                      swap(&arr[j],&arr[j+1]);
13
14
             }
15
16
17 void bsd(int arr[], int size) {
        for (int i=0;i<size-1;i++) {</pre>
18 •
19
             for (int j=0;j<size-i-1;j++) {</pre>
20
                 if (arr[j]<arr[j+1]) {</pre>
21
                      swap(&arr[j],&arr[j+1]);
22
23
             }
24
        }
25
26 •
    int main() {
27
        int size;
        scanf("%d", &size);
28
        int a1[size];
29
        int a2[size];
30
31
        //a1
32
        for (int i=0;i<size;i++) {</pre>
             scanf("%d", &a1[i]);
33
34
        }
        //a2
35
36
        for (int i=0;i<size;i++) {</pre>
             scanf("%d", &a2[i]);
37
38
39
        bsa(a1, size);
40
        bsd(a2, size);
41
        int misum=0;
42
        for (int i=0;i<size;i++) {</pre>
43
             misum+=a1[i]*a2[i];
44
        printf("%d\n",misum);
45
46
        return 0;
47 }
```

	Input	Expected	Got	
*	3 1 2 3 4 5	28	28	*
~	4 7 5 1 2 1 3 4	22	22	~
*	5 20 10 30 10 40 8 9 4 3 10	590	590	*

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 ►