

[Dashboard](#) / [My courses](#) / [CS23331-DAA-2023-CSE](#) / [Greedy Algorithms](#) / [5-G-Product of Array elements-Minimum](#)

Started on	Thursday, 29 August 2024, 10:53 AM
State	Finished
Completed on	Thursday, 29 August 2024, 11:03 AM
Time taken	10 mins 8 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 $\text{SUM}(A[i] * B[i])$ 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) {
4     int temp =*a;
5     *a=*b;
6     *b=temp;
7 }
8 void bsa(int arr[], int size) {
9     for (int i=0;i<size-1;i++) {
10         for (int j=0;j<size-i-1;j++) {
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) {
18     for (int i=0;i<size-1;i++) {
19         for (int j=0;j<size-i-1;j++) {
20             if (arr[j]<arr[j+1]) {
21                 swap(&arr[j],&arr[j+1]);
22             }
23         }
24     }
25 }
26 int main() {
27     int size;
28     scanf("%d", &size);
29     int a1[size];
30     int a2[size];
31     //a1
32     for (int i=0;i<size;i++) {
33         scanf("%d", &a1[i]);
34     }
35     //a2
36     for (int i=0;i<size;i++) {
37         scanf("%d", &a2[i]);
38     }
39     bsa(a1, size);
40     bsd(a2, size);
41     int misum=0;
42     for (int i=0;i<size;i++) {
43         misum+=a1[i]*a2[i];
44     }
45     printf("%d\n",misum);
46     return 0;
47 }
```

	Input	Expected	Got	
✓	3 1 2 3 4 5 6	28	28	✓
✓	4 7 5 1 2 1 3 4 1	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 ▶