

[Dashboard](#) / [My courses](#) / [CS23331-DAA-2023-CSE](#) / [Greedy Algorithms](#) / [5-G-Product of Array elements-Minimum](#)**Started on** Friday, 20 September 2024, 1:47 PM**State** Finished**Completed on** Friday, 20 September 2024, 1:47 PM**Time taken** 32 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
3 int main() {
4     int N;
5     scanf("%d", &N);
6
7     int array_One[N];
8     int array_Two[N];
9     int temp;
10    for (int i = 0; i < N; i++) {
11        scanf("%d", &array_One[i]);
12    }
13    for (int i = 0; i < N; i++) {
14        scanf("%d", &array_Two[i]);
15    }
16    for (int i = 0; i < N - 1; i++) {
17        for (int j = i + 1; j < N; j++) {
18            if (array_One[i] > array_One[j]) {
19                temp = array_One[i];
20                array_One[i] = array_One[j];
21                array_One[j] = temp;
22            }
23        }
24    }
25    for (int i = 0; i < N - 1; i++) {
26        for (int j = i + 1; j < N; j++) {
```

```

27         if (array_Two[i] > array_Two[j]) {
28             temp = array_Two[i];
29             array_Two[i] = array_Two[j];
30             array_Two[j] = temp;
31         }
32     }
33 }
34 for (int i = 0; i < N / 2; i++) {
35     temp = array_Two[i];
36     array_Two[i] = array_Two[N - i - 1];
37     array_Two[N - i - 1] = temp;
38 }
39 int min_sum = 0;
40 for (int i = 0; i < N; i++) {
41     min_sum += array_One[i] * array_Two[i];
42 }
43 printf("%d\n", min_sum);
44
45 return 0;
46 }
47
48

```

	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 ▶