<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>

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Started on	Tuesday, 27 August 2024, 5:08 PM
State	Finished
Completed on	Tuesday, 27 August 2024, 5:11 PM
Time taken	2 mins 50 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100 %)

Question **1**Correct

1.00

Mark 1.00 out of

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>
3 v int main() {
        int N;
        scanf("%d", &N);
        int array_One[N], array_Two[N];
9 •
        for (int i = 0; i < N; i++)
            scanf("%d", &array_One[i]);
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14
            scanf("%d", &array_Two[i]);
16
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18 🔻
                 if (array_One[j] > array_One[j+1]) {
19 •
20
                     int temp = array_One[j];
                     array_One[j] = array_One[j+1];
                     array_One[j+1] = temp;
                 }
24
            }
25
26
        for (int i = 0; i < N-1; i++) {
             for (int j = 0; j < N-i-1; j++) {
28 ▼
                 if (array_Two[j] < array_Two[j+1]) {</pre>
                     int temp = array_Two[j];
30
                     array_Two[j] = array_Two[j+1];
31
                     array_Two[j+1] = temp;
32
34
            }
36
38 •
39
            sum += array_One[i] * array_Two[i];
40
        printf("%d\n", sum);
42
44
        return 0;
46
```

