

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

<b>Started on</b>	Tuesday, 8 October 2024, 1:39 PM
<b>State</b>	Finished
<b>Completed on</b>	Tuesday, 8 October 2024, 1:58 PM
<b>Time taken</b>	18 mins 51 secs
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<b>10.00</b> out of 10.00 ( <b>100%</b> )

## 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 1 2 3 4 5 6	28

Answer: (penalty regime: 0 %)

```

1  #include <stdio.h>
2  #include <stdlib.h>
3  int cmp_a(const void *x, const void *y) {
4      return (*(int*)x - *(int*)y);
5  }
6  int cmp_b(const void *x, const void *y) {
7      return (*(int*)y - *(int*)x);
8  }
9  int main() {
10     int m;
11     scanf("%d", &m);
12     int arr1[m], arr2[m];
13     for(int i = 0; i < m; i++) {
14         scanf("%d", &arr1[i]);
15     }
16     for(int i = 0; i < m; i++) {
17         scanf("%d", &arr2[i]);
18     }
19     qsort(arr1, m, sizeof(int), cmp_a);
20     qsort(arr2, m, sizeof(int), cmp_b);
21     int sum = 0;
22     for(int i = 0; i < m; i++) {
23         sum += arr1[i] * arr2[i];
24     }
25     printf("%d\n", sum);
26     return 0;
27 }
28

```

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

	Input	Expected	Got	
✓	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 ▶