

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

Status	Finished
Started	Monday, 7 April 2025, 12:48 PM
Completed	Monday, 7 April 2025, 12:51 PM
Duration	2 mins 28 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 1 2 3 4 5 6	28

Answer: (penalty regime: 0 %)

```

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

	Input	Expected	Got	
✓	3 1 2 3 4 5 6	28	28	✓
✓	4 7 5 1 2 1 3 4 1	22	22	✓

	Input	Expected	Got	
✓	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-DP-Playing with Numbers ▶