CS23331-DAA-2024-CSE / 5-G-Product of Array elements-Minimum

5-G-Product of Array elements-Minimum

Started on	Sunday, 31 August 2025, 3:58 PM
State	Finished
Completed on	Sunday, 31 August 2025, 4:15 PM
Time taken	17 mins 17 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1 | Correct   Mark 1.00 out of 1.00   🏳 Flag question

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 1 2 3 4 5 6	28

Answer: (penalty regime: 0 %)

```
1   #include<stdio.h>
2   #include<stdlib.h>
3
4   int compare(void const *a,void const*b){
5       return(*(int*)a-*(int*)b);
6   }
7   int compare1(const void *a, const void *b){
8       return(*(int*)b-*(int*)a);
9   }
10
11  int main(){
12      int n;
13      scanf("%d",&n);
14      int a[n];
15      for(int i=0;i<n;i++){
16          scanf("%d",&a[i]);
17      }
18      qsort(a,n,sizeof(int),compare);
19      int a1[n];
20      for(int i=0;i<n;i++){
21          scanf("%d",&a1[i]);
22      }
23      qsort(a1,n,sizeof(int),compare1);
24
25      int pro=0;
26      for(int i=0;i<n;i++){
27          pro+=a[i]*a1[i];
28      }
29      printf("%d",pro);
30  }
```

	Input	Expected	Got	
✔	3 1 2 3 4 5 6	28	28	✔
✔	4 7 5 1 2 1 3 4 1	22	22	✔
✔	5	590	590	✔

```
20
10
30
10
40
8
9
4
3
10
```

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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