

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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	

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int cmp_asc(const void *a, const void *b) {
5     return (*(int*)a - *(int*)b);
6 }
7
8 int cmp_desc(const void *a, const void *b) {
9     return (*(int*)b - *(int*)a);
10 }
11
12 int main() {
13     int n;
14     scanf("%d", &n);
15
16     int arr1[n], arr2[n];
17     for (int i = 0; i < n; i++) scanf("%d", &arr1[i]);
18     for (int i = 0; i < n; i++) scanf("%d", &arr2[i]);
19
20     qsort(arr1, n, sizeof(int), cmp_asc);
21     qsort(arr2, n, sizeof(int), cmp_desc);
22
23     long long sum = 0;
24     for (int i = 0; i < n; i++) {
25         sum += (long long)arr1[i] * arr2[i];
26     }
27
28     printf("%lld\n", sum);
29     return 0;
30 }
31
```

	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	590	590	✓