5-G-Product of Array elements-Minimum

Started on	Tuesday, 30 September 2025, 12:09 PM
State	Finished
Completed on	Tuesday, 30 September 2025, 12:10 PM
Time taken	29 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 %)

```c
#include <stdio.h>
#include <stdlib.h>

int cmp_asc(const void *a, const void *b) {
    return (*(int*)a - *(int*)b);
}

int cmp_desc(const void *a, const void *b) {
    return (*(int*)b - *(int*)a);
}

int main() {
    int n;
    scanf("%d", &n);

    int array_One[n], array_Two[n];
    for (int i = 0; i < n; i++) scanf("%d", &array_One[i]);
    for (int i = 0; i < n; i++) scanf("%d", &array_Two[i]);

    qsort(array_One, n, sizeof(int), cmp_asc);
    qsort(array_Two, n, sizeof(int), cmp_desc);

    long long sum = 0;
    for (int i = 0; i < n; i++) {
        sum += (long long)array_One[i] * array_Two[i];
    }

    printf("%lld\n", sum);
    return 0;
}
```

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

	2 1 3 4 1			
✔	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.

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