RAJALAKSHMI ENGINEERING COLLEGE

Started on	Wednesday, 3 September 2025, 1:37 PM
State	Finished
Completed on	Wednesday, 3 September 2025, 1:41 PM
Time taken	3 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 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 asc(const void *a, const void *b) {
    return (*(int *)a - *(int *)b);
}
int 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), asc);
    qsort(array_Two, n, sizeof(int), desc);

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

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

```

	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 10	590	590	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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