Started on	Friday, 23 August 2024, 2:47 PM
State	Finished
Completed on	Friday, 23 August 2024, 2:58 PM
Time taken	11 mins 1 sec
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>

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

    int a[n], b[n];

    // Read elements into array a
    for (int i = 0; i < n; i++) {
        scanf("%d", &a[i]);
    }

    // Read elements into array b
    for (int i = 0; i < n; i++) {
        scanf("%d", &b[i]);
    }

    // Sort array a in ascending order
    for (int i = 1; i < n; i++) {
        int key = a[i];
        int j = i - 1;
        while (j >= 0 && a[j] > key) {
            a[j + 1] = a[j];
            j--;
        }
        a[j + 1] = key;
    }

    // Sort array b in descending order
    for (int i = 1; i < n; i++) {
        int key = b[i];
        int j = i - 1;
        while (j >= 0 && b[j] < key) {
            b[j + 1] = b[j];
            j--;
        }
        b[j + 1] = key;
    }

    // Compute the sum of products of corresponding elements
    int sum = 0;
    for (int i = 0; i < n; i++) {
        sum += a[i] * b[i];
    }

    printf("%d\n", sum);
```

```
48
49      return 0;
50  }
51
```

	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.

◄ 4-G-Array Sum max problem

Jump to...

1-Number of Zeros in a Given Array ►