CS23331-Design and Analysis of Algorithms-2023 Batch-CSE

Quiz navigation

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Finish review

Started on	Friday, 4 October 2024, 7:21 PM
State	Finished
Completed on	Friday, 4 October 2024, 7:22 PM
Time taken	1 min 43 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>
void sort_ascending(int arr[], int n) {
    int i, j, temp;
    for (i = 0; i < n - 1; i++) {
        for (j = i + 1; j < n; j++) {
            if (arr[i] > arr[j]) {
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }
}
void sort_descending(int arr[], int n) {
    int i, j, temp;
    for (i = 0; i < n - 1; i++) {
        for (j = i + 1; j < n; j++) {
            if (arr[i] < arr[j]) {
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }
}

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]);
    }
    sort_ascending(array_One, n);
    sort_descending(array_Two, n);
    int min_sum = 0;
    for (int i = 0; i < n; i++) {
        min_sum += array_One[i] * array_Two[i];
    }
    printf("%d", min_sum);
    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.

Finish review

⇥ 4-G-Array Sum max problem

Jump to...

1-Number of Zeros in a Given Array ⇤