Dashboard / My courses / CS23331-DAA-2023-CSE / Greedy Algorithms / 5-G-Product of Array elements-Minimum

Started on	Monday, 26 August 2024, 10:07 PM
State	Finished
Completed on	Monday, 26 August 2024, 10:08 PM
Time taken	54 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	28		
1			
2			
3			
4			
5			
6			

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
 2 vint main(){
 3
          int n;
          scanf("%d",&n);
 4
          int array_One[n],array_Two[n];
 5
          for(int i=0;i<n;i++)
    scanf("%d",&array_One[i]);
for(int i=0;i<n;i++)</pre>
 6
 7
 8
 9
               scanf("%d",&array_Two[i]);
10
          int temp;
11 •
          for(int i=0;i<n;i++){</pre>
               for(int j=0;j<n-i-1;j++){</pre>
12 •
13 •
                    if(array_One[j]>array_One[j+1]){
                         temp=array_One[j];
array_One[j]=array_One[j+1];
14
15
                         array_One[j+1]=temp;
16
17
               }
18
19
20 •
          for(int i=0;i<n;i++){</pre>
               for(int j=0;j<n-i-1;j++){</pre>
21 •
22 •
                    if(array_Two[j]<array_Two[j+1]){</pre>
                         temp=array_Two[j];
array_Two[j]=array_Two[j+1];
23
24
25
                         array_Two[j+1]=temp;
26
                    }
27
               }
28
29
          int sum=0;
30
          for(int i=0;i<n;i++){</pre>
               sum+=array_One[i]*array_Two[i];
31
32
          printf("%d",sum);
33
34
```

	Input	Expected	Got	
~	3	28	28	~
	1			
	2			
	3			
	4			
	5			
	6			

	Input	Expected	Got	
*	4	22	22	~
	7			
	5			
	1			
	2			
	1			
	3			
	4			
	1			
*	5	590	590	~
	20			
	10			
	30			
	10			
	40			
	8			
	9			
	4			
	3			
	_			

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 ►