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

Started on	Thursday, 19 September 2024, 10:21 AM
State	Finished
Completed on	Thursday, 19 September 2024, 10:42 AM
Time taken	20 mins 59 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 %)

```
1 #include<stdio.h>
 2 void sort(int arr[],int N){
 3
         int temp;
 4
         for(int i=0;i<N-1;i++){</pre>
 5 🔻
             for(int j=0;j<N-i-1;j++){</pre>
 6
                  if(arr[j]>arr[j+1]){
 7
                      temp=arr[j];
 8
                      arr[j]=arr[j+1];
 9
                      arr[j+1]=temp;
10
                  }
11
             }
12
         }
13
    void reversesort(int arr[],int N){
14
15
         int temp;
         for(int i=0;i<N-1;i++){</pre>
16
17
             for(int j=0;j<N-i-1;j++){</pre>
18
                  if(arr[j]<arr[j+1]){</pre>
19
                      temp=arr[j];
                      arr[j]=arr[j+1];
20
21
                      arr[j+1]=temp;
22
                  }
23
             }
24
         }
25
26
    int main(){
         int A[100],B[100],N,sum=0;
27
28
         scanf("%d",&N);
         for(int i=0;i<N;i++)</pre>
29
30
             scanf("%d",&A[i]);
31
         for(int i=0;i<N;i++)</pre>
32
             scanf("%d",&B[i]);
33
         reversesort(A,N);
34
         sort(B,N);
35
36
         for(int i=0;i<N;i++)</pre>
37
             sum+=A[i]*B[i];
38
         printf("%d ",sum);
39
40
         return 0;
41
```

	Input	Expected	Got	
~	3	28	28	~
	1			
	2			
	3			
	4			
	5			
	6			
~	4	22	22	~
	7			
	5			
	1			
	2			
	1			
	3			
	4			
	1			
~	5	590	590	~
	20			
	10			
	30			
	10			
	40			
	8			
	9			
	4			
	3			
	10			

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 ►