4-G-Array Sum max problem

Started on	Sunday, 31 August 2025, 4:33 PM
State	Finished
Completed on	Sunday, 31 August 2025, 4:39 PM
Time taken	6 mins 16 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 an array of N integer, we have to maximize the sum of arr[i] * i, where i is the index of the element (i = 0, 1, 2, ..., N).Write an algorithm based on Greedy technique with a Complexity O(nlogn).

Input Format:

First line specifies the number of elements-n

The next n lines contain the array elements.

Output Format:

Maximum Array Sum to be printed.

Sample Input:

5

2 5 3 4 0

Sample output:

40

Answer: (penalty regime: 0 %)

```c
#include <stdio.h>

int main(){
    int n;
    scanf("%d", &n);
    int a[n];
    for(int i=0;i<n;i++){
        scanf("%d", &a[i]);
    }
    for(int i=0;i<n-1;i++){
        for(int j=i+1;j<n;j++){
            if(a[i]>a[j]){
                int t = a[i];
                a[i] = a[j];
                a[j] = t;
            }
        }
    }
    int sum = 0;
    for(int i=0;i<n;i++){
        sum += a[i]*i;
    }
    printf("%d", sum);
    return 0;
}
```

	Input	Expected	Got	
✔	5 2 5 3 4 0	40	40	✔
✔	10 2 2 2 4 4 3 3 5 5	191	191	✔

	5			
✔	2 45 3	45	45	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

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