4-G-Array Sum max problem

Started on	Sunday, 31 August 2025, 3:50 PM
State	Finished
Completed on	Sunday, 31 August 2025, 3:57 PM
Time taken	7 mins 38 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>
#include<stdlib.h>

int compare(const void *a,const void *b){
    return (*(int*)a-*(int*)b);
}

int main()
{
    int n;
    scanf("%d",&n);
    int a[n];
    for(int i=0;i<n;i++){
        scanf("%d",&a[i]);
    }

    qsort(a,n,sizeof(int),compare);

    int sum=0;
    for(int i=0;i<n;i++){
        sum+=a[i]*i;
    }
    printf("%d",sum);
}
```

	Input	Expected	Got	
✔	5 2 5 3 4 0	40	40	✔
✔	10 2 2 2 4 4 3 3 5 5 5	191	191	✔
✔	2 45	45	45	✔

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Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

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