RAJALAKSHMI ENGINEERING COLLEGE

VISAANTH M 2024-IT

V2

Started on	Tuesday, 7 October 2025, 6:31 PM
State	Finished
Completed on	Tuesday, 7 October 2025, 6:32 PM
Time taken	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

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 %)

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

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

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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