Status	Finished
Started	Monday, 7 April 2025, 12:40 PM
Completed	Monday, 7 April 2025, 12:48 PM
Duration	7 mins 52 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 arr[n];
    for(int i=0;i<n;i++){
        scanf("%d",&arr[i]);
    }
        int m=0;
        for(int i=0;i<n;i++){
            for(int j=i+1;j<n;j++){
                if(arr[i]>arr[j]){
                   int t=arr[i];
                   arr[i]=arr[j];
                   arr[j]=t;
                }
            }
        }
        for(int i=0;i<n;i++)
        m+=arr[i]*i;
        printf("%d",m);
        return 0;
    }

```

	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.