Started on	Tuesday, 20 August 2024, 2:46 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:57 PM
Time taken	11 mins 15 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:

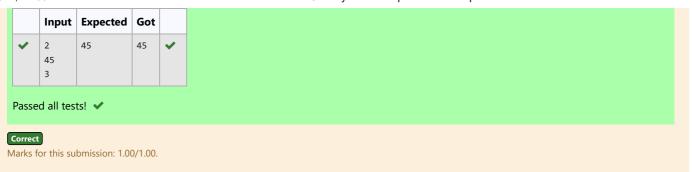Maximum Array Sum to be printed.

Sample Input:

5

2 5 3 4 0

Sample output:

40

Answer: (penalty regime: 0 %)

```c
1  #include<stdio.h>
2  int main(){
3      int n,i,j,sum=0;
4      scanf("%d",&n);
5      int arr[n];
6      for(i=0;i<n;i++)
7      {
8          scanf("%d",&arr[i]);
9      }
10     int temp=0;
11     for(i=0;i<n;i++){
12     for(j=i+1;j<n;j++)
13     { if(arr[i]>arr[j]){
14         temp=arr[i];
15         arr[i]=arr[j];
16         arr[j]=temp;}
17     }}
18     for(i=1;i<n;i++){
19         sum+=arr[i]*i;
20
21     }
22     printf("%d",sum);
23 }
```

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

	Input	Expected	Got	
✔	2 45 3	45	45	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ 3-G-Burger Problem

Jump to...   ⬍