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<b>Started on</b>	Tuesday, 27 August 2024, 2:44 PM
<b>State</b>	Finished
<b>Completed on</b>	Tuesday, 27 August 2024, 2:49 PM
<b>Time taken</b>	4 mins 18 secs
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<b>10.00</b> out of 10.00 ( <b>100%</b> )

## 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 ( $i = 0, 1, 2, \dots, N$ ). Write an algorithm based on Greedy technique with a Complexity  $O(n \log n)$ .

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 %)

```

1  #include<stdio.h>
2  #include<math.h>
3  int main(){
4      int n;
5      scanf("%d",&n);
6      int arr[n];
7      for(int i=0;i<n;i++){
8          scanf("%d",&arr[i]);
9      }
10
11     for(int i=0;i<n;i++){
12         for(int j=i+1;j<n;j++){
13             if(arr[i]>arr[j]){
14                 int temp=arr[i];
15                 arr[i]=arr[j];
16                 arr[j]=temp;
17             }
18         }
19     }
20
21     int count=0;
22     for(int i=0;i<n;i++){
23         count= count+(arr[i]*i);
24     }
25     printf("%d",count);
26 }
```

	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.

◀ 3-G-Burger Problem

Jump to...

5-G-Product of Array elements-Minimum ▶