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Started on	Tuesday, 3 September 2024, 2:30 PM
State	Finished
Completed on	Tuesday, 3 September 2024, 2:36 PM
Time taken	5 mins 54 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 ($i = 0, 1, 2, \dots, N$). 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,d,sum=0;
5      scanf("%d",&n);
6      int a[n];
7      for(int i=0;i<n;i++){
8          scanf("%d",&a[i]);
9      }
10     }
11     for(int i=0;i<n;i++){
12         for(int j=0;j<n;j++){
13             if(a[i]<a[j]){
14                 d=a[i];
15                 a[i]=a[j];
16                 a[j]=d;
17             }
18         }
19     }
20 }
21 for(int i=0;i<n;i++){
22     sum+=a[i]*i;
23 }
24 printf("%d",sum);
25 }
```

	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 ▶