

## 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 int main(){
3     int sum=0;
4     int a[50],n;
5     scanf("%d",&n);
6     for(int i=0;i<n;i++){
7         scanf("%d",&a[i]);
8     }
9     int temp;
10    for(int i=0;i<n;i++){
11        for(int j=i+1;j<n;j++){
12            if(a[j]<a[i]){
13                temp=a[j];
14                a[j]=a[i];
15                a[i]=temp;
16            }
17        }
18    }
19
20    for(int i=0;i<n;i++){
21        sum+=a[i]*i;
22    }
23    printf("%d",sum);
24 }
```

	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 ▶