Started on	Tuesday, 3 September 2024, 2:25 PM
State	Finished
Completed on	Tuesday, 3 September 2024, 2:30 PM
Time taken	5 mins 1 sec
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
#include <stdio.h>
#include <math.h>
#include <stdlib.h>
int main() {
    int n,sum=0;
    scanf("%d", &n);
    int arr[n];

    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
    for (int i = 0; i <n-1; i++) {
        for (int j = 0; j <n-i-1; j++) {
            if (arr[j] > arr[j+1]) {
                int temp = arr[j];
                arr[j] = arr[j+1];
                arr[j+1] = temp;
            }
        }
    }
    for (int i=0;i<n;i++)
    {
        sum+=arr[i]*i;
    }
    printf("%d",sum);
}
```

	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 ►