CS23331-DAA-2024-CSE / 4-G-Array Sum max problem

4-G-Array Sum max problem

Started on	Tuesday, 26 August 2025, 11:58 AM
State	Finished
Completed on	Tuesday, 26 August 2025, 12:08 PM
Time taken	9 mins 46 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1 │ Correct   Mark 1.00 out of 1.00   🏳 Flag question

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 %)

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

	Input	Expected	Got	
✔	5 2 5 3 4 0	40	40	✔
✔	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.

Finish review

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