

Question 1

Correct

Mark 1.00 out of 1.00

Given an array of N integer, we have to maximize the sum of $\text{arr}[i] * i$, 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<stdlib.h>
3
4  int comp(const void *a, const void* b){
5      int A = *((int*)a);
6      int B = *((int*)b);
7      return A-B;
8  }
9
10 int main(){
11     int n;
12     scanf("%d",&n);
13     int *arr = malloc(sizeof(int)*n);
14     for(int i=0;i<n;i++){
15         scanf("%d",&arr[i]);
16     }
17     qsort(arr,n,sizeof(int),comp);
18     int sum = 0;
19     for(int i=0;i<n;i++)
20         sum+= (i*arr[i]);
21     printf("%d",sum);
22     return 0;
23
24 }
```

	Input	Expected	Got	
✓	5 2 5 3 4 0	40	40	✓
✓	10 2 2 2 4 4 3 3 5 5 5	191	191	✓

	Input	Expected	Got	
✓	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 ▶