Dashboard / My courses / CS23331-DAA-2023-CSE / Divide and Conquer / 1-Number of Zeros in a Given Array

Started on Friday, 30 August 2024, 1:37 PM

State Finished

Completed on Friday, 30 August 2024, 2:46 PM

Time taken 1 hour 8 mins

Marks 1.00/1.00

Grade 10.00 out of 10.00 (100%)

Question 1
Correct

Mark 1.00 out of 1.00

Problem Statement

Given an array of 1s and 0s this has all 1s first followed by all 0s. Aim is to find the number of 0s. Write a program using Divide and Conquer to Count the number of zeroes in the given array. Input Format

First Line Contains Integer m – Size of array

Next m lines Contains m numbers – Elements of an array

Output Format

First Line Contains Integer - Number of zeroes present in the given array.

Answer: (penalty regime: 0 %)

```
include<stdio.h>
 2
     int main()
 3
 4
         int n, temp1=-1, temp2=-1;
 5
         scanf("%d",&n);
 6
         int arr[n];
         for(int i=0; i< n; i++)
 8
 9
             scanf("%d",&arr[i]);
10
11
         int x=(n-1)/2;
12
         for(int i=0; i< x; i++)
13
14
             if(arr[i]==0)
15
16
                 temp1=i;
17
                 break;
18
             else if(arr[x-i]!=0 && arr[x+i]==0)
19
20
21
                  temp2=x+i;
22
                 break;
23
             }
24
25
           (temp1!=-1)
26
             printf("%d",n-temp1);
27
28
29
         else if(temp2!=-1)
```

	Input	Expected	Got	
~	5 1 1 1 0	2	2	~
~	10 1 1 1 1 1 1 1 1 1 1 1	0	0	*
*	8 0 0 0 0 0 0	8	8	*
*	17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0	2	2	*

Passed all tests! ✓ Correct Marks for this submission: 1.00/1.00.						
◆ 5-G-Product of Array elements- Minimum	Jump to	2-Majority Element ▶				