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

Started on	Tuesday, 3 September 2024, 1:45 PM
State	Finished
Completed on	Tuesday, 3 September 2024, 2:54 PM
Time taken	1 hour 9 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 v int count(int arr[], int low, int high){
 3 ▼
         if(low>high){
 4
             return 0;
 5
 6
 7 🔻
         if(low==high){
 8 •
             if(arr[low]==0){
 9
                 return 1;
10
             else{
11 •
12
                 return 0;
13
             }
14
         }
15
16
        int mid = (low+high)/2;
17
18
        int lm = count(arr, low, mid);
19
         int rm = count(arr, mid+1, high);
20
         return rm+lm;
21
22
    }
23
24 ▼
    int main(){
25
         int m;
         scanf("%d",&m);
26
27
         int arr[m];
28
        for(int i=0;i<m;i++){</pre>
             scanf("%d",&arr[i]);
29
30
31
32
        int ans = count(arr, 0, m-1);
33
        printf("%d",ans);
34
35
    }
36
37
```

	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 ►