## <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	Wednesday, 2 October 2024, 7:40 PM
State	Finished
Completed on	Wednesday, 2 October 2024, 7:41 PM
Time taken	1 min 10 secs
Marks	1.00/1.00
Grade	<b>10.00</b> out of 10.00 ( <b>100</b> %)

```
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 zero(int a[],int left,int right){
 3 🔻
        if(left>right){
 4
            return 0;
 5
        if(left==right){
 6
 7 ,
            if(a[left]==0){
 8
                 return 1;
 9
10
             else{
                 return 0;
11
12
             }
13
        int mid = (left+right)/2;
14
15
        if(a[mid] == 0){
16
            return zero(a,left,mid)+zero(a,mid+1,right);
17
        else{
18
19
             return zero(a,mid+1,right);
20
21
   }
22 v int main(){
        int m;
23
24
        scanf("%d",&m);
25
        int a[m];
26
        for(int i=0;i<m;i++){</pre>
27
             scanf("%d",&a[i]);
28
29
        int n=zero(a,0,m-1);
        printf("%d",n);
30
31
        return 0;
32
   }
```

	Input	Expected	Got	
~	5	2	2	~
	1			
	1			
	1			
	0			
	0			

	Input	Expected	Got	
*	10 1 1 1 1 1 1 1 1 1 1 1	0	0	~
<b>~</b>	8 0 0 0 0 0	8	8	~
~	17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	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 ►