

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

<b>Started on</b>	Friday, 6 September 2024, 1:24 PM
<b>State</b>	Finished
<b>Completed on</b>	Friday, 13 September 2024, 1:39 PM
<b>Time taken</b>	7 days
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<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 %)

```

1  #include<stdio.h>
2  int main(){
3      int m;
4      scanf("%d",&m);
5      int num[m];
6      int c=0;
7      for(int i=0;i<m;i++){
8          scanf("%d",&num[i]);
9      }
10     }
11     int l=0,h=m-1;
12     while(l<=h){
13         int mid = (l+h)/2;
14         if( (num[mid+1]==1 )){
15             l = mid+1;
16         }
17         else if(num[mid-1]==0){
18             h = mid;
19         }
20         else if (mid==0)
21         {
22             c =m;
23             break;
24         }
25         else{
26             c = (m-mid)-1;
27             break;
28         }
29     }
30
31
32 }
33
34 printf("%d",c);
35 }
```

	Input	Expected	Got	
✓	5 1 1 1 0 0	2	2	✓

	Input	Expected	Got	
✓	10 1 1 1 1 1 1 1 1 1 1 1 1 1	0	0	✓
✓	8 0 0 0 0 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 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 ▶