Status	Finished
Started	Saturday, 12 April 2025, 11:59 AM
Completed	Saturday, 12 April 2025, 12:01 PM
Duration	2 mins 29 secs
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 %)

```c
#include <stdio.h>

int count_zeros(int arr[], int low, int high) {
    if (low > high) {
        return 0;
    }

    int mid = (low + high) / 2;

    if (arr[mid] == 0) {
        return (high - mid + 1) + count_zeros(arr, low, mid - 1);
    } else {
        return count_zeros(arr, mid + 1, high);
    }
}

int main() {
    int m;
    scanf("%d", &m);

    int arr[m];

    for (int i = 0; i < m; i++) {
        scanf("%d", &arr[i]);
    }

    int zero_count = count_zeros(arr, 0, m - 1);

    printf("%d\n", zero_count);

    return 0;
}

```

	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	0	0	✓
✓	8 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 0 0	2	2	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ Problem 5: Finding Complexity using counter method

Jump to...

2-Majority Element ►