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;
    }
    if (low == high)
    {
        if (arr[low] == 0)
        {
            return 1;
        } else {
            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]);
    }
    printf("%d\n", count_zeros(arr, 0, m - 1));
    return 0;
}



```

	Input	Expected	Got	
✔	5 1 1 1 0 0	2	2	✔
✔	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 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 ►