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 cntZeros(int arr[], int l, int r) {
    if (l > r) {
        return 0;
    }

    if (l == r) {
        return (arr[l] == 0) ? 1 : 0;
    }

    int mid = (l + r) / 2;

    int lZeros = cntZeros(arr, l, mid);
    int rZeros = cntZeros(arr, mid + 1, r);

    return lZeros + rZeros;
}
int main(){
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)scanf("%d",&arr[i]);
    int res = cntZeros(arr, 0, n - 1);
    printf("%d ",res);
}
```

	Input	Expected	Got	
✔	5 1 1 1 0 0	2	2	✔
✔	10 1 1 1 1 1 1 1 1 1 1	0	0	✔