Started on	Friday, 26 September 2025, 1:42 PM
State	Finished
Completed on	Friday, 26 September 2025, 1:55 PM
Time taken	13 mins 1 sec
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

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
1  # include <stdio.h>
2
3  int count(int arr[], int low, int high){
4      if((low>high) || (low==high && arr[low] != 0)) return 0;
5      if((low==high) && arr[low] == 0)
6          return 1;
7      return count(arr, low, (high+low)/2) + count(arr, 1+(high+low)/2, high);
8  }
9
10 int main(){
11     int n;
12     scanf("%d", &n);
13     int arr[n];
14     for (int i=0; i<n; i++)
15         scanf("%d", &arr[i]);
16     printf("%d", count(arr, 0, n-1));
17 }
```

	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 1 0 0	2	2	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.