Recursion - Sum of Array Elements

Write a program to find the sum of array elements using recursion.

Input Format

- The Input consists of one integer and a set of integers.
- The first integer corresponds to the number of array elements.
- The second Input corresponds to the array elements.

Constraints

NA

Output Format

The output consists of one integer that corresponds to the sum of the array elements.

Sample Input 0

```
5
1
2
3
4
5
```

Sample Output 0

```
15
```

Explanation 0

Here the sum of the array elements(1+2+3+4+5) is 15 and hence the output is 15.

Sample Input 1

```
2
1
2
```

Sample Output 1

```
3
```

Explanation 1

Here the sum of array elements (1+2) is 3 and hence the output is 3.

C

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

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

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code

Testcase 0 ✔ Testcase 1 ✔

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
5
1
2
3
4
5
```

Your Output (stdout)

```
15
```

Expected Output

```
15
```