Recursion

Write a C function to find the smallest element in an array using recursion. If length of array is zero print “NULL”.

Input Format

Line1: Number of elements in array
Line2:Array elements(space separated)

Constraints

0<=array.length<=1000

Output Format

Smallest element in array

Sample Input 0

```
5
3 4 5 6 9
```

Sample Output 0

```
3
```


C

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

int find_min(int arr[], int n)
{
    if (n == 1) {
        return arr[0];
    }

    int min_of_rest = find_min(arr + 1, n - 1);

    if (arr[0] < min_of_rest) {
        return arr[0];
```

```
    } else {
        return min_of_rest;
    }
}

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

    if (n == 0) {
        printf("NULL");
        exit(0);
    }

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

    int x = find_min(arr, n);
    printf("%d", x);

    return 0;
}
```

Line: 1 Col: 1

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