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//Created By Ritwik Chandra Pandey on 6/11/21
//Quick Sort

#include <stdio.h>



void display(int arr[15], int n) {
	int i;
	for(i=0;i<n;i++){
	    printf("%d ",arr[i]);
	}
	printf("\n");

}
int partition(int*,int,int);
int quickSort(int arr[15], int low, int high) {
	int j;
	if(low<high){
		j= partition(arr, low,high);
		quickSort(arr,low,j-1);
		quickSort(arr,j+1,high);
	}

}
int partition(int arr[15], int lb, int ub){
	int pivot,down = lb, up = ub, temp;
	pivot = arr[lb];
	while(down<up){
		while(arr[down]<=pivot && down<up){
			down++;
		}
		while(arr[up]>pivot){
			up--;
		}
		if(down<up){
			temp = arr[up];
			arr[up] = arr[down];
			arr[down] = temp;
		}
```

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        }
        arr[lb] = arr[up];
        arr[up] = pivot;
        return up;

}
void main() {
        int arr[15], i, n;
        printf("Enter array size : ");
        scanf("%d", &n);
        printf("Enter %d elements : ", n);
        for (i = 0; i < n; i++) {
                scanf("%d", &arr[i]);
        }
        printf("Before sorting the elements are : ");
        display(arr, n);
        quickSort(arr, 0, n - 1);
        printf("After sorting the elements are : ");
        display(arr, n);
}
```