```c
#include <stdio.h>

void printArray(int *A, int n)
{
    for (int i = 0; i < n; i++)
    {
        printf("%d ", A[i]);
    }
    printf("\n");
}

void merge(int A[], int mid, int low, int high)
{
    int i, j, k, B[100];
    i = low;
    j = mid + 1;
    k = low;

    while (i <= mid && j <= high)
    {
        if (A[i] < A[j])
        {
            B[k] = A[i];
            i++;
            k++;
        }
        else
        {
            B[k] = A[j];
            j++;
            k++;
        }
    }
    while (i <= mid)
    {
        B[k] = A[i];
        k++;
        i++;
    }
```

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40:     while (j <= high)
41:     {
42:         B[k] = A[j];
43:         k++;
44:         j++;
45:     }
46:     for (int i = low; i <= high; i++)
47:     {
48:         A[i] = B[i];
49:     }
50:
51: }
52:
53: void mergeSort(int A[], int low, int high){
54:     int mid;
55:     if(low<high){
56:         mid = (low + high) /2;
57:         mergeSort(A, low, mid);
58:         mergeSort(A, mid+1, high);
59:         merge(A, mid, low, high);
60:     }
61: }
62:
63: int main()
64: {
65:     // int A[] = {9, 14, 4, 8, 7, 5, 6};
66:     int A[] = {9, 1, 4, 14, 4, 15, 6};
67:     int n = 7;
68:     printArray(A, n);
69:     mergeSort(A, 0, 6);
70:     printArray(A, n);
71:     return 0;
72: }
73:
```