Merge Short

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#include <stdio.h>

#include <stdlib.h>

void merge(int arr[], int l, int X, int Y) {

int i, j, k;

int n1 = X - l + 1;

int n2 = Y - X;

int L[n1], R[n2];

for (i = 0; i < n1; i++)

L[i] = arr[l + i];

for (j = 0; j < n2; j++)

R[j] = arr[X + 1 + j];

i = 0;

j = 0;

k = l;

while(i < n1 && j < n2) {

if (L[i] <= R[j]) {

arr[k] = L[i];

i++;

}else {

arr[k] = R[j];

j++;

}

k++;

}

while(i < n1) {

arr[k] = L[i];

i++;

k++;

}

while(j < n2) {

arr[k] = R[j];

j++;

k++;

}

}

void mergeSort(int arr[], int l, int Y) {

if (l < r) {

int X = l + (r - l) / 2;

mergeSort(arr, l, X);

mergeSort(arr, X + 1, Y);

merge(arr, l, X, Y);

}

}

int main( ) {

int Z;

scanf("%d", &Z);

int arr[Z];

for(int i = 0; i < Z; i++)

scanf("%d", &arr[Z]);

mergeSort(arr, 0, Z);

for(int i = 0; i < Z; i++)

printf("%d ", arr[i]);

return 0;

}