Merge Soft Algorithm
Pre-Lab #3

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1. Problem Specification

The goal of this pre-lab assignment is to rearrange elements from a list using the Merge Soft algorithm. The list is {38,27,43,3,9,82,10}.

2. Program Design

For a Merge Sort we first need to split the big list into separated elements in a recursive way and then build the array in the inverse way again but with all the elements sorted.

The following steps were required to develop this algorithm:

a) Discover the middle element
b) Split the array into two new arrays: one with the elements from the right side and another with the elements from the left side
c) Do this recursively until get only separated elements
d) Starts doing the inverse building new small arrays until reach the original size, but with all the elements sorted

2. Results

1) {38 | 27 | 43 | 3 | 9 | 82 | 10}

2) {38 | 27 | 43 | 3} and {9 | 82 | 10}

3) {38, 27}, {43 | 3}, {9 | 82} and {10}

4) {38}, {27}, {43}, {3}, {9}, {82} and {10}

5) {27, 38}, {3, 43}, {9, 82} and {10}

6) {3, 27, 38, 43} and {9, 10, 82}*

7) {3, 9, 10, 27, 38, 43, 82}**