

Keywords

Merge sort – a list is split into individual lists, these are then combined (2 lists at a time).

List – a set of data.

Algorithms

Merge Sort

Merging Lists



CARR MANOR
COMMUNITY SCHOOL

Objectives

ADVANCED:
Understand the principles of a merge sort.

EXPERT:
Be able to perform a merge sort on a set of data.

Split all elements into individual lists.
Compare the first element in both lists.
Put the smallest into a new list.
Compare the next element of 1 list with the second element of the 2nd list.
Put the smallest into a new list.
Repeat until merged.

Can you merge these two lists of numbers?

3 7 8 10 11

4 6 8 13

COMPUTER SCIENCE

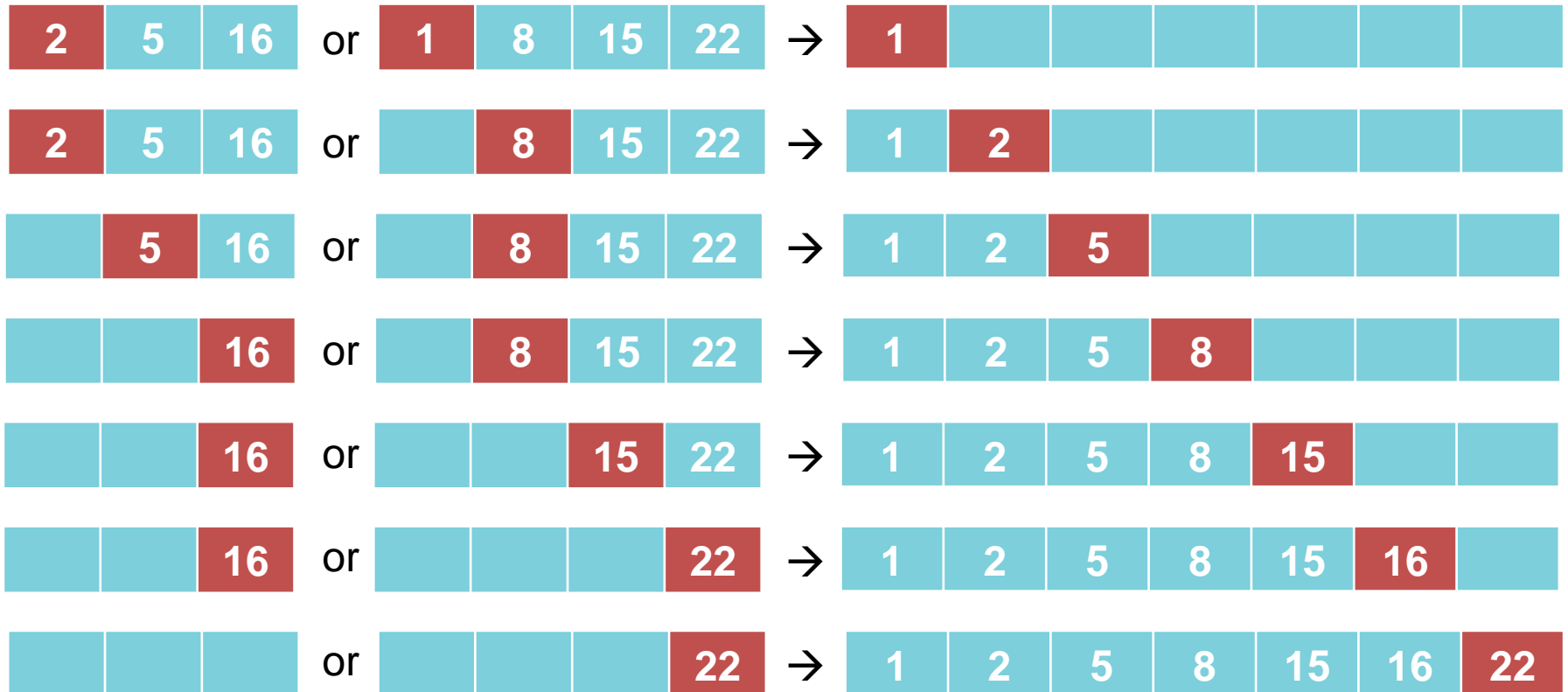


Merge List Example

List A

List B

Merged List





Merge Sort Algorithm

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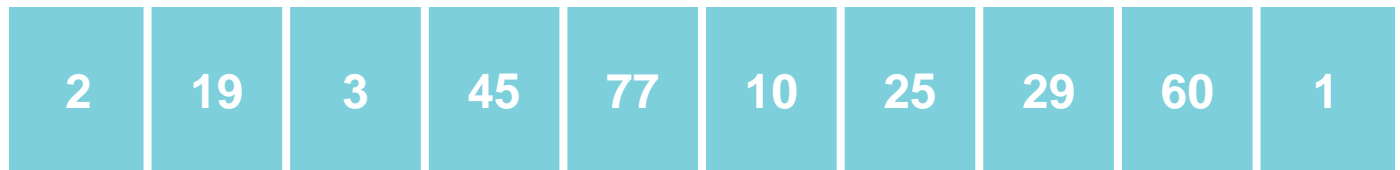
Split a list into individual lists (each element is on its own).

Merge the lists in pairs, putting the smallest first.

Merge the lists.

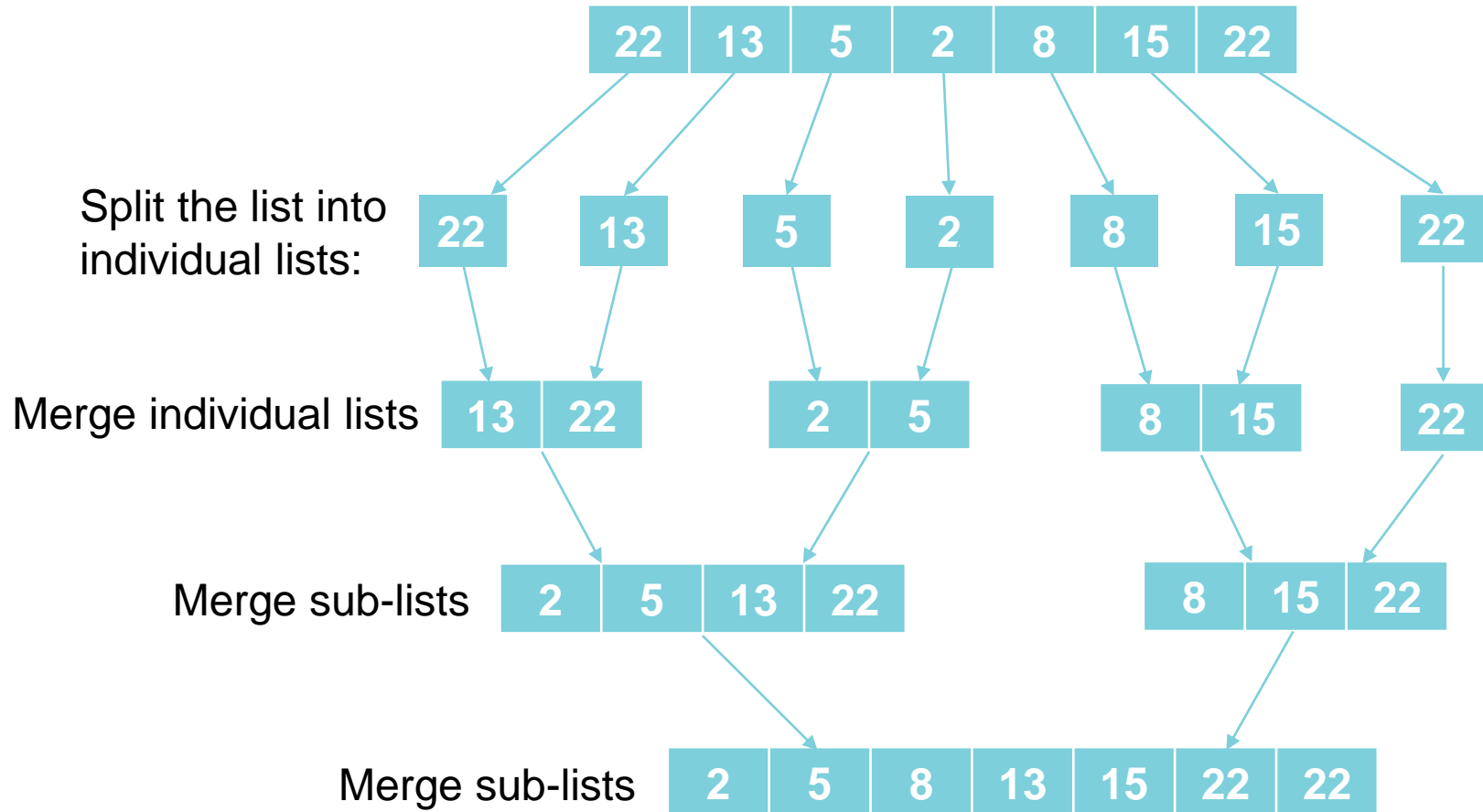
Keep merging until it is in order.

Can you merge sort these numbers?





Merge Sort Example



C O M P U T E R

S C I E N C E

Activity Answer

