

programmerings metodik labb1

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1 begin-end functions

When we add the data to the buffer we use a normal int pointer and if we debug the code we can see that the code uses the begin-end functions that doesn't return a const due to the type we specified. On the other hand when we write out the buffers content we can see with debugging that the program uses the const int pointer begin-end functions due to us specifying this type.

2 Recursion

The sort algorithm is represented in a recursive function. The function keeps calling itself until another selection takes over and returns an exit call that doesn't execute the function again such as when the array size is 1 or zero.

3 Algorithm

The merge sort starts by dividing the array into 2 half, then divides those to into more and so on until having multiple pairs of 2 elements that now can be divided once again and compared and sorted in the right order. The sorted arrays now merge to the top again but in doing so also sorting themselves with the new merged with arrays.

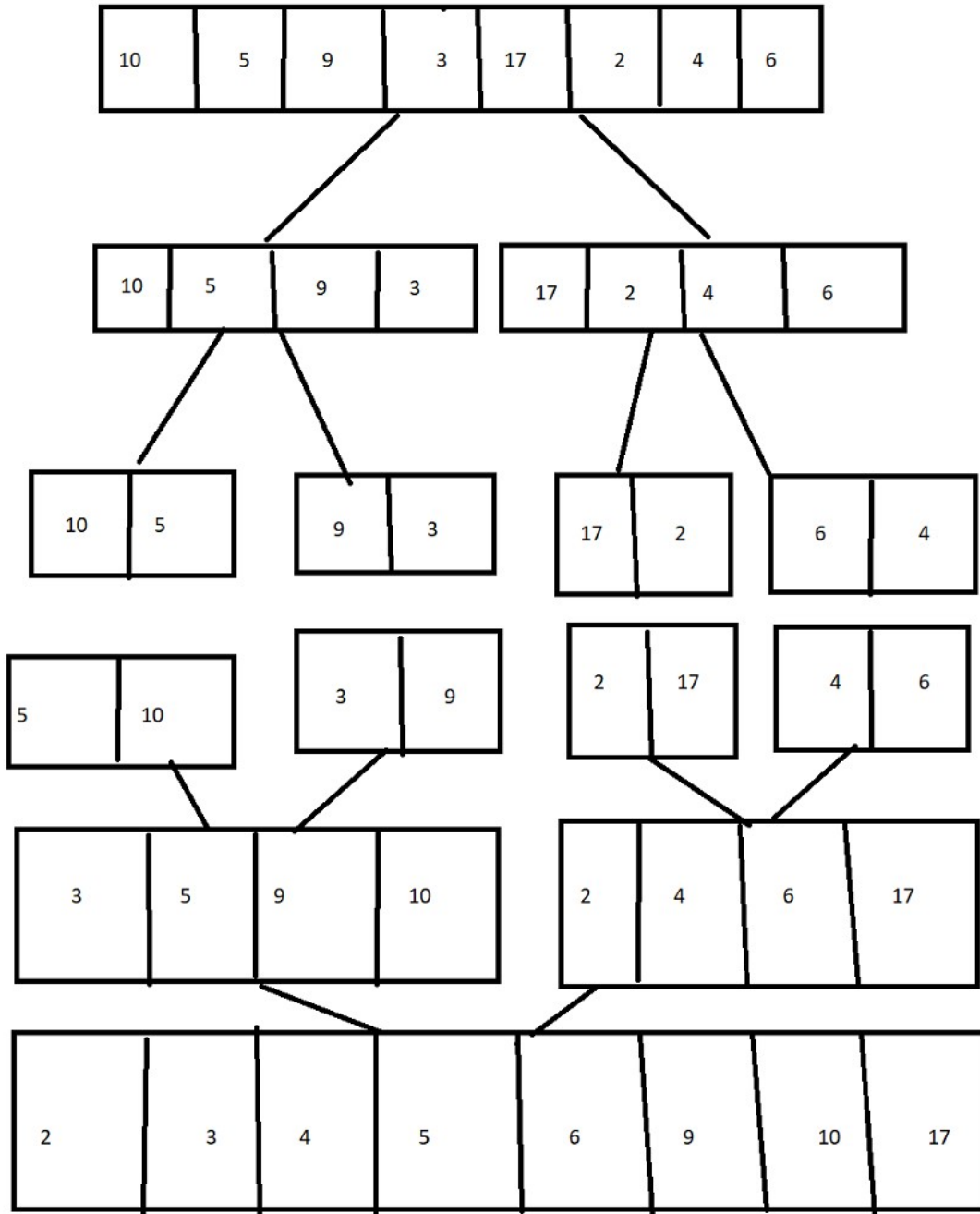


Figure 1: We can see here how the sort merge breaks down and builds up again.