DAA assignment

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1   Explanation in Nutshell

I have made a **base2 function** which merges two trapezium and returns outline as an array of trapeziums which are contiguous or disjoint. In case if the two trapeziums are disjoint then just return the vector of two trapeziums.

Now I have a **mergesort** sort routine which is typical and **merge** function which takes two outline(which are represented in terms of trapeziums) and returns the combined trapezium. The algorithm behind this is that I have pointers on both the input arrays, first I merge the trapeziums at the given indices. This return an array of trapeziums from which i call the last trapezium to be the "rem" and then based on the lower X coord of second sides of input trapeziums i increment the pointer of the corresponding array to get the new element to merge with the "rem".

The algorithm goes on till both the array exhaust and finally after getting the output array i just iterate over the array and compute the final area and the final length.