

Threaded merge sort

Wednesday, 12 February 2020

08:53

$n = 8$

Unsorted Array



Thread 1

Thread 2

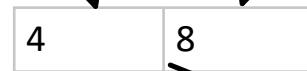
$n = 4$



$n = 2$



$n = 1$



sort



Sorted Array

19	35
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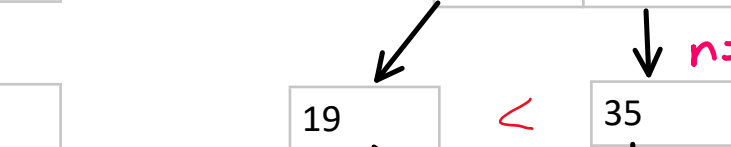
$n=4$

	8	19	35
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$n=2$

	19	35
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$n=1$

19

<

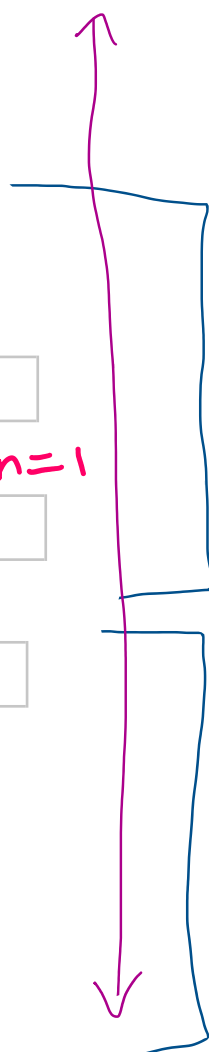
35

19	35
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	8	19	35
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sort

21	35
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divide unsorted array

$\log(n)$

merge sorted sub-array

$O(n \log n)$