

Lecture 22: Sorting

08/15/22



Upcoming

- A6 Resubmission due Tuesday 8/16 @ 11:59pm
- A8 due Tuesday 8/16 @ 11:59pm
 - Cannot be resubmitted!
 - Late days allowed, but the last day of IPL is Wednesday, 8/17

Upcoming

- Course eval – 1 point extra credit! Closes Friday 8/19 @ 11:59pm
- Huffman Bonus – additional instructions posted on Ed
- Final Exam
 - Thursday 8/18: Final Exam part 1 in your section
 - Friday 8/19: Final Exam part 2, 10:50 - 11:50am

Merge sort

- **merge sort:** Repeatedly divides the data in half, sorts each half, and combines the sorted halves into a sorted whole.

The algorithm:

- Divide the list into two roughly equal halves.
 - Sort the left half.
 - Sort the right half.
 - Merge the two sorted halves into one sorted list.
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- An example of a "divide and conquer" algorithm.
 - Invented by John von Neumann in 1945

Example

