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Today's topics: Heapsort, external sorting, papers. Textbook §§ 21.5–21.6, papers. Next class: Splay trees; textbook Chapter 22.

- 1. List the members of your group below. Underline your name.
- 2. Depict the action of *in-place heapsort* on the following array. Depict the state of the array after each *deleteMin* operation. Also depict (in usual graphical form) the implicit heap encoded by the array at each step.

66 70 99 43 58 77 41 74 81 70

3. Depict the action of 2-way merge-sort on the following array.

37 90 35 88 49 55 13 50 26 73 31 51 99 46 90 13 27 84

 $4. \ \,$ Repeat Question 3 using a 3-way merge-sort.