

Today: sorting; merge-sort; sorting in external memory. §§21.6.

Next class: shell sort; polyphase merging. §§8.1–8.4; Reynolds’s paper.¹

Reminder: Read material *before and after* class.

1. List the members of your group below. Underline your name.

2. 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

¹Samuel W. Reynolds, “A Generalized Polyphase Merge Algorithm,” *Communications of the ACM* 4/8 (1961).

3. Repeat Question 2 using a 3-way merge-sort.

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

4. (informal homework) Sort the above array using insertion sort, selection sort, and bubble sort.