

Today: Homework 2.1 due; B-trees; disk data structures. § 19.8.

Next class: (different from syllabus) Binary heaps; §§ 21.1–21.3.

Reminders: Homework (with reading); newsgroup; portfolio work.

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

2. Depict the result of inserting the following keys, in the order presented, into an initially empty *B-tree* with parameters $M = 4$ and $L = 3$, based on the definitions and methods in the textbook.¹ (The tree is thus a B^+ -tree.)

70, 50, 60, 65, 40, 75, 62, 63, 41, 42, 51, 52, 53, 54

Depict some intermediate states of the tree, *including at least the states after each node-splitting operation.*

Similarly, depict the result of deleting the following keys, in this order, *depicting at least the intermediate states after each node-merging operation.*

40, 41, 52, 63

¹Mark Allen Weiss, *Data Structures and Problem Solving Using Java*, 4th edition (Addison-Wesley, 2010), §19.8.

[additional space for answering the earlier question]