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Today's topics: B-trees. §19.8. Next class: catch-up; review.

- 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.

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

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