



Week 3: AVL Trees and B-Trees

Time

This lesson should take **approximately 3.5-6 hours** of dedicated time to complete, with its videos and assignments.

Lessons

The activities for this lesson are listed below (with required assignments in bold italics):

Activity	Estimated Time
Lesson 3.1 Lecture Videos	20 minutes
Lesson 3.2 Lecture Videos	20 minutes
<i>Week 3 Graded Quiz</i>	30 minutes
<i>Week 3 Challenge Problem</i>	1 hour
<i>MP #2</i>	1-3 hours

Key Concepts

- AVL and B-Tree algorithms and data structures for maintaining balanced trees with algorithmic analysis to show the additional burden of rebalancing a tree after inserting or deleting and item can be amortized into the improved time complexity of the search operations for overall improved performance.

Getting and Giving Help

You can get/give help via the following means:

- Use the **Learner Help Center** to find information regarding specific technical problems. For example, technical problems would include error messages, difficulty submitting assignments, or problems with video playback. If you cannot find an answer in the documentation, you can also report your problem to the Coursera staff by clicking on the **Contact Us!** link available on each topic's page within the Learner Help Center.