Session 30
Strategy 4: Transform-and-Conquer

🗎 Lecture Summary

Students should attempt to figure out pseudocode (and perhaps implement) at least one of the balanced search trees. Heaps are easy to implement and are the more useful by far.

Balanced Search Trees

1. Motivation: dictionaries and dictionary operations
2. Tree balance

Transformation to Balanced Search Tree by Instance Simplification

1. AVL trees basics (check lecture slides to see rotations)
2. Efficiency of dictionary operations on AVL trees

🗎 Session Exercise

📖 **Exercise 6.3** • 1, 4, 7a, 8 ⚒ <mark>9</mark>

🗎 Reading List

📖 6.3

🗎 Keywords

AVL tree, [node] balance, balanced [tree], dictionary [data structure], [tree] rotation