

Assignment 3

Do the following problems and exercises from the book. Note that the ordering reflects the order in which the relevant material is being covered by the course. Always *justify* your answers.

1. Do exercises 3.2.15, 3.2.24, 3.2.36, 3.3.38

Recommended exercise: 3.2.20

Hints:

3.3.38 *First show that any BST can be transformed to a right-hand chain using only right-rotations.*

2. Do exercises 3.4.15, 3.5.25

Recommended exercise: 3.5.24

Hints:

3.4.15 *Just show that in the worst case you do a number of compares proportional to N^2 (even with array resizing).*

3.5.24 *Think of trees.*