

CS 112 – Spring 2012, Homework 4

Problems due at the beginning of class on Thursday, April 4

Just a few short problems for this week.

Question 1 (20 pts). *Complete the problem discussed in lab this week: Given the pre-order traversal of a BST (assume it's given to you in a comma-delimited input string), produce the unique BST that corresponds to this string.*

Submit code for the method `BST<Integer, Integer> PreorderToBST (String s);`

Question 2 (10 pts). *Reasoning about BSTs.*

a.) *Exercise 3.2.3 on p. 416.*

b.) *Exercise 3.2.4 on p. 416.*

Question 3 (10 pts). *Reasoning about balanced BSTs.*

a.) *Exercise 3.3.2 on p. 449.*

b.) *Exercise 3.3.11 on p. 449.*

Question 4 (Challenge problem: not graded). .

a.) *Exercise 3.3.22 on p. 450.*