CS 430 – FALL 2017
INTRODUCTION TO ALGORITHMS
HOMEWORK #3
DUE Fri Oct 6, 11:25am

1. (4 points) Exercise 9.1-2

2. (4 points) Exercise 9.3-9 (proof required)

3. (4 points) Problem 9-1 Largest i numbers in sorted order

4. (3 points) Exercise 12.1-5

5. (3 points) Exercise 12.2-4

6. (4 points) Exercise 12.2-5

7. (3 points) Given an arbitrary binary tree T with integer keys stored at the nodes, design an efficient algorithm which determines whether or not T is a binary search tree. What is the time complexity of your algorithm?