

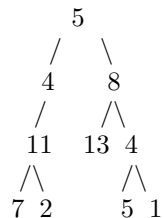
CS180 Fall 19 Homework 7

assigned 11/27, not collected

All algorithms/proofs should be in bullet form: step by step or psuedo code.

1. Exercise 10 on page 419
2. Exercise 15 on page 421
3. Exercise 18 on page 424
4. Exercise 24 a on page 429
5. Exercise 33 on page 435
6. Exercise 1 on page 505
7. Exercise 2 on page 505
8. Exercise 3 on page 505
9. If you had an infinite supply of water and a 5 quart and 3 quart pail, how would you measure exactly 4 quarts? Can you do this for any two jars of sizes A and B in order to measure exactly A-1? Justify your answer.
10. Given a list of non negative integers, arrange them such that they form the largest number. For example, given [3, 30, 34, 5, 9], the largest formed number is 9534330. (Note: The result may be very large, so you need to return a string instead of an integer.)
11. Given a binary tree and a sum, find all root-to-leaf paths where each path's sum equals the given sum.

For example, given the below binary tree and sum = 22,



the method returns the following: [5,4,11,2], [5,8,4,5]