Final Exam Study Guide

For the final, you need to know:
1. Lecture #1
    a. How to write a class in C++
2. Lecture #2
    a. How to trace stack operations
    b. How to implement a stack class
    c. Convert infix notation to prefix and postfix
3. Lecture #3
    a. How to write a recursive functions
    b. How to trace programs with recursive functions
4. Lecture #4
    a. How to trace programs with linked lists
5. Lecture #5
    a. How to trace programs with binary trees
    b. How to traverse binary trees preorder inorder postorder
    c. How to traverse general trees preorder inorder postorder
6. Lecture #6
    a. How to state the efficiency in big O notation of each sort for best case, worst case, and average case.
    b. How to create a heap from a set of values presented in a certain order and then to use the heap to sort them
7. Lecture #7.
    a. How to state the efficiency in big O notation of linear search, binary search and hashing.
    b. How to create a B-tree of order n heap from a set of values presented in a certain order.