## **Computer Science 223 Exam 1 Study Guide**

Given an AVL tree insert a key. Show the tree before, during, and after balancing.

What are the four properties of an AVL tree balance?

What are the five properties of a red black tree.

Given a Red Black tree insert a key. Show the tree before, during, and after balancing.

What is object inheritance?

What is a virtual table?

What is a virtual method?

What is a purely virtual method?

Why can't an abstract class be directly instantiated?

What is Big O Notation?

What big O notation is bigger? (quiz question)

Know bubble sort.

Traverse a tree depth first and breadth first (using a queue).

What is a template class?

Know how to implement a template class (hw 2)