

CSC 161 FINAL EXAM STUDY GUIDE

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Consult study guides for all previous tests.

Pay particular attention to skills covered in all the labs, and also to array searching: linear search, binary search, recursive binary search, and non-recursive binary search.

Sorting. Sorting by repeated selection of the maximum value from the unsorted part of the array. Quicksort. Understand the partition method that is used in Quicksort.

In addition, there will be a lot of emphasis on the new material that was covered since the last test. Collections: sets and lists. Linked allocation and contiguous allocation. ArrayList and Linked List classes.

Comparators and the Comparable interface.

Operations on linked lists, both recursive and non-recursive, as covered in the Week 9 labs.

Stacks and Queues. LIFO and FIFO lists.

Singly-linked lists and doubly-linked lists.

Binary Trees. Root and leaves of a binary tree. Concept of children of a binary tree. Recursive binary tree traversal methods: preorder, postorder, and inorder.