CS170 Final Exam Study Guide

Details:
- Thursday, Apr. 30th, 6:30-9pm in White Hall, 208 (Note: this is NOT the usual classroom)

Bring to the exam:
- Number 2 pencils (and a good eraser) – there will be a scan-tron portion of the exam. We will not have extra pencils, so come prepared.
- Your Emory ID – we will be checking IDs

Do NOT bring to the exam:
- Backpacks, bookbags, overlarge purses, etc. If you bring a large bag to the exam, you will be asked to leave it at the front of the room. The rows are very close together and there is simply not room.
- Books, notes, calculators, mobile phones. You will not be allowed to have these around your desk as the exam is closed book, closed notes, no calculators.

Procedures during the exam:
- We will be checking IDs at the door. Once inside the room, you will be assigned a seat. In order to facilitate check-in, please plan to arrive between 5:30 and 6:15pm. We will begin the exam at 6:30 and if you arrive at 6:30 you will lose some time.
- Restroom visits will only be allowed during the first hour of the exam (approximately 6:30-7:30pm). Only one student will be allowed out of the room at a time. There will be a sign-out sheet at the back of the room. If you think you might need an exception to this policy, notify your instructor BEFORE the day of the exam.

Format:
- The final will have fewer code writing questions than previous exams. It will be composed primarily of “easy to grade” questions (we do have to grade 180+ of these exams in less than 24 hours after all) such as multiple choice (“chose the best answer...”), fill in the blank, multiple answer (“choose all of the following which...”), and code tracing (“give the output of this program/function...").
- The exam will have 150 points. You will have the full 150 minutes (2.5 hours) to work on the exam. Each point equates to approximately 1 minute of effort. Thus, if a problem is worth 2 points, you should be able to answer it in approximately 2 minutes. Use this feature of the exam to pace yourself and gauge how much time you should spend on any one problem. If a problem is worth 5 points, don't spend 25 minutes on it!
- The exam will contain (approximately!) 25% material from Exam 1, 25% material from Exam 2, and 50% new material. However, given the nature of the course, the material naturally builds upon itself.

Topics:
- An excellent and very comprehensive list of topics, concepts, and questions developed by Prof. Garvey.
- The final exam will NOT cover:
  - hardware of the computer (usually the first week of the course)
  - Linux commands unrelated to Java
  - Advanced searching and sorting algorithms (Bubblesort, Quicksort, etc). However, you ARE responsible for the Selection and Insertion sort algorithms.

Extra practice:
- Many Midterms (Exams 1 and 2) from this and past semesters.
- www.codingbat.com/java Excellent site for practicing specific concepts (if-stmts, loops, logic problems, arrays, etc). You can write solutions to problems in browser and run against test cases. Also has help files and videos (scroll to bottom of page). Make sure you are looking at the Java problems as the site has both Java and Python.
- Textbook, end of chapter problems. We have covered Chapters 1-6, some of Ch. 7, Chapter 8-9, some of Ch. 10, and some of Ch. 20. See your class syllabus for assigned readings.
- A sheet of recursion problems for practice.