The University of North Carolina at Greensboro
CSC 100: The Beauty and Joy of Computing
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Handout 9
December 3, 2012

CSC 100 Review for Final Exam

This document gives information to help you study for the final exam in CSC 100. The format of the final exam will be similar to the midterm: some terminology (matching) and some short answer questions, including both explanation/discussion type questions and some simple BYOB code writing and interpretation. The final will include questions from throughout the semester, but will focus primarily on material since the midterm. As a rough estimate, expect about 20% of the exam to cover material from the first part of the semester, and 80% on the material after the midterm. Questions from before the midterm will focus on topics covered on the sample and actual midterm exams – if you study those and understand the answers you should be fine (but the key is understanding the answers, not just memorizing them).

There are three primary sources of topics: lectures, labs, and *Blown to Bits* readings. As a suggestion for studying, I would recommend taking the following lists and expanding them to outline all the basic topics and making lists of terminology. Use your notes as a guide, and there are copies of slides for all lectures and *Blown to Bits* discussions on the class web page. Then think up questions about the material that we covered, and write out answers – don't just look at the questions and say "OK, I know that" because people are really good at fooling themselves! By forcing yourself to write out answers to questions, you really have to address the questions and not just skip over them. The best approach for most people is to organize study groups so you can ask each other questions, but you can still do this fairly effectively if you are studying on your own.

Topics Since the Midterm

The following lectures were after the midterm:

> Lecture 8: Reductions and Recursion
> Lecture 9: Data Representation - Part 2, Media
> Lecture 10: Artificial Intelligence
> Lecture 11: The Internet
> Lecture 12: Student Choice: Copyright and DRM
> Lecture 13: Limits and Future of Computing

The following labs were after the midterm:

> Lab 8: Send in the clones
> Lab 9: Problem self-similarity and recursion
> Lab 10: Putting it all together

The following chapters from *Blown to Bits* were after the midterm:

> Chapter 4: Needles in the Haystack: Google and Other Brokers in the Bits Bazaar
> Chapter 5: Secret Bits: How Codes Became Unbreakable
> Chapter 6: Balance Toppled: Who Owns the Bits?