Midterm Review

Topics in CS (Chapters 1-5 in Gersting)

* Selection sort, binary search, insertion sort
  + Do not memorize pseudocode
* What is cs?
* What are algorithms?
* Representing algorithms in pseudocode
* Basic algorithmic analysis
* Representing information using bits (binary: any base to any base conversions)
* Circuit construction
* Introductory computer organization
  + Look at exams on Courseworks, examples in Big Java

Java programming Skills (Big Java Ch 1-6, 8) (ch 8 is recommended reading)

* Variable assignment
* Primitive data types in Java
* Control structures
  + Conditionals
  + Loops
* Writing classes
  + Instance variables
  + Methods
  + Public vs private
* Instantiate classes
* Static methods
* Parameter passing
  + Passing primitives
  + Passing object references
* Designing better classes

Midterm design

* Question 1: 10 terms to define
* Question 2: 40 multiple choice
* You should be comfortable on easier textbook review exercises
  + Review homework problems
  + You should know what an RGB code is (do not need to say what color it is)
  + You do not need to know about decoders or multiplexor