CSC 260.002 Study Guide for Midterm 1 Tentative Exam Date: Thursday, September 22

This exam covers material from chapters 2-5 of the textbook, power point notes for these chapters, sample programs posted to the website, and your first four programming assignments. The exam is a paper-and-pencil exam, not on-line. It is closed book and closed note. Know the material listed below for each chapter by being able to write code that use the items listed, read code and understand what the code does, and read code to determine if it is syntactically correct.

Chapter 2

Declaration and usage of variables and constants, assignment statements, arithmetic operators, short-cut operators. Input using the Scanner and output using System.out.print and System.out.println. See also the printf statement in chapter 4. Casting for proper division. You will not need to apply other forms of casting.

Chapter 3

Conditions, if statements, if-else statements, nested if-else statements, switch (and break). Complex conditions using &&, \parallel and ! (you will not need to know ^). How to compare Strings using equals, equalsIgnoreCase and compareTo. The challenge of comparing doubles using == and !=. Using the Random class to generate random integer numbers.

Chapter 4

System.out.printf. String methods of charAt, toUpperCase/toLowerCase.

Chapter 5

Each of while, do-while and simple for loops (you will not need to write for-loops that have multiple loop variables). Nested loops.

Logic: Be able to write code such as summing up a list of values, computing an average, finding the smallest and largest values in a loop, iterating through the characters in a String to output or compare each character one at a time, etc.