

CSCI 1320 (Principles of Programming I), Fall 2012

Review for Midterm Exam

1 Format of the exam

The exam will be in class October 10. You will have 75 minutes. Like the quizzes, it is open book/notes, which means you can use the textbook, material from the course Web site, and your notes and graded work. You may not use a calculator or computer *except* to view the above material.

Questions will mostly be similar in format to the ones in quizzes — possibly some short-answer or multiple choice, some “what does this program do/print”, some “write a program to do this task” — but probably somewhat longer and/or more difficult.

2 Topics to review

You are responsible for all material covered in class or in the assigned reading up through the chapter on recursion for repetition (chapters 1 through 6), but the focus will be on material presented or at least mentioned in class. You should review in particular the following topics. It would probably also be helpful to review the sample programs from the course Web site and the quizzes and assignments.

- Number systems and data representation — converting decimal to binary/octal/hexadecimal and vice versa (integers only), basic idea of how negative integers and floating point numbers are represented and what this means for what can be represented.
- Variables in Scala (types, declarations).
- Expressions and statements in Scala.
- Conditional execution in Scala (if/else and simple uses of `match`).
- Functions in Scala.
- Recursion and recursive functions in Scala.