

# 15-100, Introductory/Intermediate Programming

## Final Exam, **Fall 2006**

The final exam for 15-100 will be a written examination covering the fundamental principles of computer programming using Java.

### **Exam Topics**

The final examination will consist of a number of questions based on the following topics from 15-100:

- (a) use of Java primitive data types and all arithmetic, relational and logical operators
- (b) processing of strings in Java using methods of the `String` API
- (c) use of conditional statements (`if` and `if-else`) and loops (`while`, `for`, `do-while`)
- (d) use of a simple Java class that implements some type of common object
- (e) analysis of a real-world object for its state/properties and behavior
- (f) implementation of methods for a real-world object
- (g) tracing of Java code that uses one-dimensional arrays
- (h) implementation of Java code to traverse a one-dimensional array of object references
- (i) implementation of Java code to take an array of object references and move the references around based on some criteria
- (j) implementation of Java code to create a new collection of object references from an existing array of object references based on some criteria
- (k) implementation of `equals` and `toString` methods for an object class

If you have any questions regarding whether a specific topic covered in your class will be on the final exam, please ask your instructor.

**SEE OTHER SIDE FOR IMPORTANT INFORMATION!**

## **Additional Exam Information**

### **WHEN & WHERE**

Your final exam will be given on **Tuesday, December 19** from **1:00-4:00PM**. Your instructor will inform you to the specific exam room for your section.

### **WHAT YOU SHOULD BRING**

You should bring 2 pens or pencils to the exam and your student ID card (or other government-issued photo ID card). Your ID will be checked during the final exam, and your exam may not be graded if you do not have valid ID.

### **WHEN YOU SHOULD ARRIVE**

Plan on arriving **15 minutes before** the exam begins to hear instructions about seating arrangements and exam rules. If you arrive late, you will not receive extra time to complete your exam. Additionally, if you arrive after at least one student has completed the exam, you can be denied a seat for the exam and will receive a 0 for the exam.

### **USE OF ELECTRONIC DEVICES IS PROHIBITED**

During the examination, **use of electronic devices of any kind are prohibited**, including, but not limited to, cell phones, pagers, laptops, calculators, etc. Leave these devices at home or in your dorm room. Don't bring them since they may be confiscated before the exam begins.

### **RESTROOM BREAKS**

**Please use the restroom before the exam begins.** Restroom breaks during the exam will be allowed for exceptional cases.