Practice Problems

Alex Vondrak

Fall 2011

Below is a list of self-test problem numbers (categorized by page number) from your textbook, *Data Structures & Other Objects Using Java^{TM}*, 3e, by Michael Main. The questions asked (generally) reflect the material we've covered in class—if a particular detail sounds like something we never covered, it's probably because we didn't. But taking a look over these problems is good preparation for the midterm. The solutions are given in the back of the chapter in which they occur.

It may also help to refer to Appendix G in the text for material on the formal definition of Big-O.

p15 1, 2

p16 7, 9

p26 11, 12, 13, 14, 15, 16

p51 1, 2, 7

p52 8

p109 1, 2, 3, 4

p110 11, 12, 13

p248 1*, 2

p249 3, 4, 5, 6

p252 7, 8, 9, 10, 11†

p284 22

p309 1, 2‡

p333 11

p343 17, 18

---

*This problem refers to classes developed throughout the book. To answer the question, you need only know that they were defined using the standard `class Foo {...}` code you use to define your own classes.

†These problems occur after a section about generic methods that *aren't* tied to a particular class. Intuitively, the generics still work basically the same way. You can read the section if you want clarification.

‡Further questions in the book about stack applications tend to use algorithms that we've not covered in class (e.g., to handle precedence rules in converting infix to postfix). They're similar, though, so if you feel like reading about them, it's good practice.