

Computer Science 105

Suggested Practice Problems

Spring Semester, 2011

The simplest answer to “What practice problems should I study?” is “All of them.” The second simplest answer appears below, where the practice problems are sorted into three categories: recommended, consider, and ignore.

Notice that the practice problems are unevenly distributed throughout the book. Some chapters have many; others have just a few. Allocate your effort evenly across the material, not across the problems.

If you want additional practice material, the homework problems at the end of each chapter are often variants of the practice problems.

Chapter 1 Overview. Read it. Again.

Chapter 2 Bits, bytes, and words. *Lots* of practice.

Recommended: 1-5, 7-10, 12-17, 19, 21-27, 30-32, 35, 38, 42-44

Consider: 6, 11, 18, 20, 28-29, 33-35, 38, 42-44

Ignore: 49-54 (floating point)

Chapter 3 Assembly language and programs.

Recommended: 1-10, 13-18, 20-23, 30, 32, 34-35, 37-38, 43

Consider: 11-12, 19, 24-29, 31, 33, 36, 44-45

Ignore: 39-42 (structures) and 46-53 (64-bit)

Chapter 4 Y86. Skip it.

Chapter 5 Performance. Important, but untestable. Skip it.

Chapter 6 Memory. Important. This section is light on practice problems.

Recommended: 8, 10, 13-19

Consider: 9, 11-12, 20-22

Chapter 7 Linking. Skip it.

Chapter 8 Exceptions.

Recommended: 2-4, 8

Consider: 1, 5-7

Chapter 9 Virtual memory. Also important.

Recommended: 1-4, 6-8, 10

Consider: 5, 9

Chapter 10 I/O.

Recommended: 1-5

Chapter 11 Networks.

Recommended: 1, 5

Consider: 2-4

Chapter 12 Concurrent programming.

Recommended: 1-3, 5-10, 12, 15

Consider: 4, 11, 13-14