

Chapter 1: Computer Systems

Overview

This chapter is an introduction to basic computer systems and the Java programming language.

Need to Know

The following concepts are important for this chapter:

- describe the relationship between hardware and software
- identify basic computer hardware and explain what it does
- know the steps involved in program compilation and execution

Reading Assignment

Read pages 2 – 41 and “summary of key concepts” on page 45-47 in Java Software Solutions textbook.

Textbook Assignment

Book problems are due at the beginning of the class period *before* the Chapter 1 test. Problems will be checked for completion. Solutions will be posted on Moodle at the end of due date and you must correct your work and turn in on test day.

- Self-Review: 1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 1.13, 1.14, 1.15, 1.16
- Multiple Choice: 1.1, 1.6, 1.7, 1.8
- Short Answer: 1.7, 1.8, 1.9

PracticeIt! Assignments

Complete the Chapter 1 PracticeIt! assignments listed in Moodle. Attach printed copy of “My Problems” page sorted with newest on top.

Chapter 1: Introduction to Java Programming

- Self-Check 1.2: binary 1
- Self-Check 1.3: binary 2
- Self-Check 1.6: legal identifiers
- Self-Check 1.16: withoutPrintStatements

Video Tutorials and CodeLab Exercises

- 1.1: Hardware Basics
- 1.2: Number Systems
- 1.3: Coding Intro
- 1.4: Java Classes
 - **CodeLab:** JAVA CODELAB/IMPERATIVE PROGRAMMING/HELLO WORLD PROGRAMS/CONSOLE IO/20503-20515

Labs

From Moodle, download and extract the files in the zip file “Chapter 1 Lab Files” to your \APCS folder. The lab manual will be included in the directory.

Lab	Assignment	Completed
1	Your First Program - HelloWorld <ul style="list-style-type: none">HelloWorld.java	
2	Poem <ul style="list-style-type: none">Poem.java	
3	Comments <ul style="list-style-type: none">Count.java	
4	Program Names <ul style="list-style-type: none">Simple.java	
5	Correcting Syntax Errors <ul style="list-style-type: none">Problems.java	