Chapter 2: Objects and Primitive Data

Overview

During this chapter you should begin to feel comfortable with the declaration of variables, and discuss what happens at each point in declaring an object, creating an instance of that object, assigning vs. changing the state of the object and how that differs from what happens with primitive data. You will begin to do mathematical calculations and should come to understand both the mathematical operators and their precedence.

Reading Assignment

Read pages 58 – 79, 82 – 98, 104-111 (Java applets) and "summary of key concepts" on page 112 in Java Software Solutions textbook.

Textbook Assignment

Book problems are due at the beginning of the class period before the Chapter 2 test. Problems will be checked for completion. You are encouraged to correct your answers with the solutions key during class, break or lunch.

- pg 114 Multiple Choice 2.1, 2.2, 2.3, 2.5, 2.6, 2.7, 2.9, 2.10
- pg 116 Short Answer 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.9, 2.10, 2.11
- pg 121 AP Style Questions 2.1, 2.2, 2.3

PracticeIt! Assignments

Complete the following PracticeIt! assignments. For each problem, *handwrite* the solution and attach with a printed copy of your "My Problems" page *sorted with newest on top*.

Chapter 1: Introduction to Java Programming

- Self-Check 1.8: confounding
- Self-Check 1.10: Shaq
- Self-Check 1.14: Test of Knowledge
- Exercise 1.2: Spikey

Chapter 2: Primitive Data and Definite Loops

- Self-Check 2.1: legalIntLiterals
- Self-Check 2.2: expressions1
- Self-Check 2.4: expressions3
- Self-Check 2.11: values of A,B,C
- Exercise 2.1: displacement

Labs

Download the zip file from GitHub, "Chapter 2 Lab Files". Save to your \APCS folder and extract. A \Chapter 2 folder will be created containing the lab manual and lab files. After your lab has been stamped, handwrite your solution and attach to this sheet. *You will NOT receive any credit for labs unless you turn in your handwritten solutions.*

Lab	Assignment	Completed
1	• Two Meanings of Plus (`PlusTest.java`)	
	• Table of Student Grades (your own program, create `StudentGrades.java`)	

Lab	Assignment	Completed
2	• Area and Circumference of a Circle (`Circle.java` and `CircleTest.java`)	
	• Painting a Room (`Paint.java`)	

Lab	Assignment	Completed
3	• Computing Distance (`Distance.java`)	
	• Rolling Dice (your own program, create `Dice.java`)	

Lab	Assignment	Completed
4 Java Applets	• Introduction to HTML pg 9-11 (create your own webpage)	
	• Drawing Shapes (`Shapes.java`)	
	• Colors in Java (`Colors.java`)	
	• Drawing a Face (you create `Face.java` and `html` file.)	

Lab	Assignment	Completed
5 GUI's & Graphics	• Flipping a Coin (`Coin.java` and `CoinTest.java`)	