

## Chapter 3: Program Statements

### Overview

This chapter deals with program structure and control. As a part of this chapter you should become familiar with both decision and looping structures and the process of decomposing a problem to decide where these structures are necessary. Also you need to be able to recognize situations where loops and decision structures are necessary.

### Reading Assignment

Read pages 126 – 156, 160 – 172 and “summary of key concepts” on page 179 in Java Software Solutions textbook.

### Textbook Assignment

Book problems are due at the beginning of the class period *before* the Chapter 3 test. Problems will be checked for completion. You are encouraged to correct your answers with the solutions key during class, break or lunch.

- Self-Review Questions pg 180: all
- Multiple Choice pg 180-183: 3.1 – 3.10
- Short Answer pg 184-186: 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 3.9, 3.10, 3.12, 3.13, 3.14
- AP Style pg 190-191: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6

### PracticeIt! Assignments

Complete the following Chapter 3 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 2: Primitive Data and Definite Loops

- Self-Check 2.24: howManyLines
- Self-Check 2.27: nested loops
- Exercise 2.2: loopSquares
- Exercise 2.6: numberTriangle

#### Chapter 4: Conditional Execution

- Self-Check 4.2: logicExpressions1
- Exercise 4.8: smallestLargest

#### Chapter 5: Program Logic and Indefinite Loops

- Self-Check 5.1: whileLoops

## Labs

Download the zip file from GitHub, “Chapter 3 Lab Files”. Save to your \APCS folder and extract. A \Chapter 3 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
	• Rock, Paper, Scissors (Rock.java)	
	• Pizza Order (PizzaOrder.java)	

Lab	Assignment	Completed
	• Counting and Looping (LoveCS.java)	
	• Characters (Chars.java you create)	
	• Odd and Even (OddEven.java you create)	
	• Powers of 2 (PowersOf2.java)	
	• A Guessing Game (Guess.java)	
	• Factorials (Factorial.java you create)	

Lab	Assignment	Completed
3 GUI's & Graphics	• Divide GUI (DivideTwoGui.java)	