

**Carleton University**  
**Department of Systems and Computer Engineering**  
**SYSC 2004 - Object-Oriented Software Development - Winter 2015**

**Lab 2 Prelab Exercises**

CodingBat is a Web site of online programming problems that helps students develop their coding skills in Java and Python (visit [codingbat.com](http://codingbat.com)). This site is free, and you can use it without creating an account. (I recommend creating a CodingBat account - it's free, and the benefit is that the code you write while logged in will be saved between sessions.)

The Java coding problems at this site don't cover all of the topics taught in SYSC 2004, but are a great way to verify that you have the prerequisite knowledge required for this course (Boolean logic, loops, arrays and strings). All students should be able to complete the "AP CS medium" problems (see section AP-1) after the first few weeks of lectures. Experience has shown that students who are unable to complete these problems, on their own, do not have an adequate understanding of the fundamental concepts taught in SYSC 1005, ECOR 1606 and SYSC 2006. Because they are still struggling with basic programming concepts, they will likely have difficulty grasping the more advanced concepts that are covered in a course dealing with object-oriented programming.

**Instructions**

Complete Parts 1 and 2 before Lab 2. You will not submit your solutions to cuLearn for grading. Instead, after you have typed your solution to a problem, click the **Go** button to send your code to the CodingBat server. The server will run a test suite on your code and provide you with feedback.

**Part 1**

Click on the Warmup-1 link.

Do these problems: `sleepIn`, `monkeyTrouble`, `sumDouble`, `diff21`, `parrotTrouble`, `makes10`, `nearHundred`, `posNeg`, `or35`, `icyHot`, `in1020`, `hasTeen`, `loneTeen`, `intMax`, `close10`, `in3050`, `max1020` and `lastDigit`.

**Part 2**

Click on the Logic-1 link.

Do all the problems except: `alarmClock`, `fizzString` and `fizzString2`.