CS 125 – Introduction to Computer Science Fall 2009

Assignment 03 – Java Concepts, Chapter 02: Using Objects
Due: ~~Sept-16~~ Sept-18

Based somewhat on exercise P3.9 pg 117.

Goal: Learn how to build & manipulate objects.

In this assignment, you'll be using a class I've already made for you called Insect.java. Objects of the class insect can be used to represent a hypothetical insect on the Cartesian plane. To create a new Insect object, we have to specify a name. We also have the option of specifying its starting location. If we don't specify a starting location, it will start at position <0, 0>. Once created, we can move the insects in the cardinal directions and as well as get its current coordinates. We can also get its name.

Create a new project called InsectTester.

Create a new class called InsectTester.

Download the file Insect.java from the course homepage & copy it the same location as your project code (i.e. wherever InsectTester.java is located).

Inside the InsectTester class, add main method.

In the main method, build a new object (instance) of the Insect class called "beetle".

Have the beetle make the following moves in order: ▲►►▲▼►▲.

Print out the beetle's expected & actual location.

Next create a new insect called "ant" at location <1,-2>.

Make the any series of method calls to get the ant to the same location as the beetle – print out its location to verify your answer.

Put a copy of your source code (**InsectTester.java**) into a **.zip** file named **CS125-A03-YOURNAME.zip,** replacing **YOURNAME** with your actual first and last name.

Upload the **.zip** file to Moodle.

The following rubric will be used for grading:

Description	**Points**
Correct filename(s) are used	**2**
Program has author & description comments	**3**
Source code compiles without errors	**5**
Program executes	**5**
Beetle object is at expected location	**1**
Expected & actual Beetle are printed to the screen	**2**
Ant object is at expected location	**1**
Ant location is printed to the screen	**1**
TOTAL POSSIBLE POINTS:	**20**