CSCE 150A - Problem Solving Using Computers Laboratory - Spring 2009

Lab Assignment 6 - 02/18/2009

Name: _____

Section: 8:00 11:00 12:30 6:30

Problem 1: Practice with Pointers

The following table has columns for five `int` variables, giving their addresses and initial values. In each blank row, fill in the values of the variables after the code statement has executed.

Variable Name:	a	b	c	d	e
Variable Address:	104	108	112	116	120
Variable Value:	20	4	104	10	1
`*c = b * d;`					
`e = &d-b;`					
`a = *c + **e;`					
Bonus: `b = b***e**c*d;`					

Problem 2: Using Multiple Output Parameters

Download `currency.c` from the course web site. Fill in the `main` method to run a program that asks for an amount of money, and then prints the value in several different currencies, the amount of snacks you could buy, and how much you should tip your GTA. You will use the following methods with output parameters in order to calculate the values:

- `void currencies(double usdollars, double* euros, double* pounds, double* yen)` places into `*euros`, `*pounds`, and `*yen` the value of `usdollars` after exchange.
- `void snacks(double usdollars, int* snickers, int* ice_cream_cones, int* sodas)` buys as many Snickers, ice cream cones, and sodas as you can afford with `usdollars`.
- `void gtaTip(double usdollars, double* tip, double* money_left)` places the amount you should tip your GTA into `tip` and the remaining amount into `money_left`.

When you are done, show the instructor. There is no grading script this week, so you have freedom with your output! Make sure the values returned by the methods are printed to the screen.

Hints: Keep all of your code in the `main` method, but call the defined methods to get the values.