Assignment #3  Income tax time

General Instructions. For this assignment, you will be writing one program with four parts. It should be submitted as one file using NYU Classes. The file should be named:

   Lastname-Firstname-assign3.py

You should have a comment at the top of the program, and a comment for each program part. The beginning comment should also include the assignment number, your name, the date, and your class section. This will prevent confusion.

Be sure to test your program on different inputs.

NOTE: DO NOT DEFINE YOUR OWN FUNCTIONS – WRITE THE FOUR PARTS AS ONE LONG PROGRAM.

Part 1. Pretty-print salary and withholdings. (5 points)

The program has two floating-point inputs, your 2013 salary and an amount withheld for taxes. Print these values out in a column, so that the decimal points are aligned. Since this is money, there should be two decimal places printed.

For example, if the input salary is $45,000.45, and the amount withheld is $3,033.50, your program should print:

   Salary for 2013 :   45,000.45
   Amount withheld:   3,033.50

   Hint: Use the format function.

Part 2. Do your taxes (5 points)

The income tax rate is a flat 15%. Calculate and print how much tax you owe on the salary that you input in Part 1. Then, determine whether you should get a refund or need to pay more, based on the amount withheld in part 1. That is, if the tax is greater than the amount withheld, you have to pay the difference. If the tax is less than the amount withheld, you get a refund.

Your program should print out either the amount owed or the amount refunded, labeled accordingly. Don’t forget to handle the unlikely case where you owe nothing and there is no refund. Your program still needs to print something.
Part 3. Graduated tax  (5 points)

You’re in luck!  It is possible to pay a graduated tax instead of the flat tax, but you need to do the computation to see which tax is lower.  
With the graduated tax, the rate is 10% on the first $30,000.  The rate is 20% on any remaining amount over $30,000.  Your program should calculate the graduated tax on the salary amount from Part 1, and print the result.

**Hint:** There are two cases to consider.  The first case is when the salary is below $30,000, and only one rate (10%) applies.  The second case is when the salary is over $30,000:  you must apply the lower rate to $30,000, and the higher rate to the amount over $30,000.

Part 4: Decide which tax scheme is better.  (5 points)

Compare the graduated tax computed in Part 3 with the flat tax that you computed in Part 2.  Print out which one is smaller.