Homework 5: Overloading and Inheritance: due April 18

1. Write a method called findSmallestInt that takes an integer array as a parameter and returns the smallest value in the array. Overload the method to allow it to also take two integer arrays as parameters and return the smallest value of both arrays. Show a screenshot of both methods working.

2. Write a subclass of Faculty (shown in lecture) called Professor. Give Professor a String representing the class that the Professor teaches, and add a newClass method that changes the value of the String. Modify the printinfo method to print the class that the professor teaches after the rest of the information is printed. Don't forget to write a constructor that initializes the class that the professor teaches, as well as everything that the super constructor initializes. Write a main method that makes a Professor that teaches ECE 122, and call the printinfo method. Show a screenshot of the result.

3. Write a series of classes that represent a hierarchy of political parties; include at least two methods in each class. Create a driver class to test the methods in your classes. At least one class should be a "grandchild" class; in other words a class which is a subclass of a subclass. Show the use of the keyword "super" in both a constructor and in a non-constructor method. Show a screenshot of your hierarchy in action.

4. Is it possible to overload a constructor? Show a simple example of constructor overloading if it is possible.