

## CS520 Assignment I

Due: February 9

**Problem 1** Write a class that simulates the behavior of a coin changer. Instead of pouring a container of coins into a hopper, the user will provide the number of each kind of coin as input data. the inputs are:

1. The number of pennies
2. The number of nickels
3. The number of quarters
4. The number of dimes
5. The number of quarters.

You need to provide methods to set each of the above. For example `setDimes(int dim)`.

The output is the value of the coins in dollars and cents. You should define methods `findCentsValue()` (computes the total value of all the coins in cents), `findDollars()` (computes the total value in cents divided by 100), `findChange()` (computes the total value in cents modulo 100; i.e. the remainder).

You should write an application class to test your coin changer class. Hand in your code (for both classes) and sample output.

**Problem 2** This problem involves developing a program for use by the New Jersey Department of Motor Vehicles. You are to create the following classes:

1. **Person** which has the fields name, address, and driver's license number.
2. **Ticket** which has the fields name, date, location, offence code, arresting officer, points.
3. **DrivingRecord** which has the fields person and an Array List field holding that person's tickets. It should also have methods for computing total number of points and for printing out the person's entire record.

You should write a driver class to test these classes for at least two individuals who have recieved several tickets. Then print out both your code for all the classes and sample output.

Hand in a hard copy of both your code and the output. You also need to make your code available to the instructor as per the instructions given in class.