Java Course Prequel

1. Create a service class called **CustomerService** which will allow you to interact with **Customer** resources. The **CustomerService** class should allow you to
    1. Retrieve a Customer using a customer id.
    2. Retrieve all customers.
    3. Insert a customer.

   Optionally, you can add functionality to update and delete a customer.

   Have your CustomerService use a **CustmerDAO** to be the keeper of the data.

   The **Customer** class should have at least the following properties:
    1. An integer **id**
    2. A name
    3. A dateOfBirth of type **LocalDate**
        1. You can initialize a LocalDate with the **of** method, e.g. LocalDate.of(1957, 10, 10)
    4. Zero or more phone numbers
    5. A status, which can have the following values:
        • Privileged
        • Normal
        • Restricted

   You can add any other properties you want.

2. Write Unit tests for all your classes.
3. Create a second DAO. You can simply make a copy of the first one.
4. Set it up so that the CustomerService class can use either DAO
    1. Hide the DAOs behind an interface
    2. Make sure your CustomerService class is referring to the DAO with the interface type (Program to an interface, NOT an implementation)
5. Set it up so that you can change which DAO you use the changing a property in a properties file.
    1. Create a properties file with some property to specify which DAO you want to use
        1. e.g. myapp.profile=dev or myapp.profile=prod
    2. Create a Factory class which reads the property from the properties file and creates and returns a DAO based on the property.