Kotlin Course Labs

Lab 1.

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

2. The **CustomerService** should use a **CustomerDAO** to "persist" customers. Choose a suitable collection class to store your Customers. The DAO should implement basic crud operations:
    1. insert
    2. update
    3. delete
    4. find(long id)
    5. findAll.

3. The **Customer** class should have at least the following properties:
        1. An 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. An email
        6. A status, which can have the following values:
            - Privileged
            - Normal
            - Restricted

4. Test your CustomerService class by creating several customers and printing out their information.

Lab 2.

1. Add functionality to your application to be able to retrieve a subset of Customers based on some criteria that the user will provide as an argument, e.g.
    1. Find all Customers with a Status of Privileged
    2. Find all Customers who have at least one phone number
    3. Find all Customers older than a certain age. This may require a look through the javadoc for LocalDate. Or you can ask your Instructor.