**--Ximan Liu**

**--CSC452**

**--Final Project**

**--README.docx**

PartA:

1. Create table zipcode based on (zip, city, state, latitude, dst) in the file zipcode.sql.
2. Populate and insert in data with your own data in the file phase3.sql.
3. Create a procedure called add\_information to add new information to the ZIPCODE table in the file phase2.sql.

add\_information(60000, 'Jacksonville', 'IL', 42, 1);

add\_information(61111, 'Miami', 'IL', 42, 1);

1. Use Java connected with SQL Developer by JDBC by your code in the file print.java.
2. Put all the files zipcode.sql, phase2.sql, phase3.sql, print.java in a folder called PartA.

PartB:

6)

Manually create the following database tables:

CREATE TABLE CUSTOMER(CID, CName, CLocation, CState);

CREATE TABLE CUSTOMER\_SHADOW(CID, CName, CLocation, CState, USERNAME, MODTIME);

Put all content in one file named Q1.sql below PartB folder.

7)

Create a trigger to track all inserts into a table. Specifically, for each record inserted into the CUSTOMER table, the trigger should insert a duplicate record into the CUSTOMER\_SHADOW table along with the information of the user who performs the insertion (the USER column) as well as the date/time of the insertion (the MODTIME column). The MODTIME column keeps track of the date/time in the following character string format: MM/DD/YY hh:mm:ss.

Put all content in one file named Q2.sql below PartB folder.

8)

For the CUSTOMER table created in problem #6 above, insert the following records by using bulk binding:

CUSTOMER = {(001, 'FURNITURE', 'PLANO', 'TX'),

(002, 'MOUNTAIN', 'BOULDER', 'CO'),

(003, 'GALLERY', 'SAINT ANTONIO', 'TX'),

(004, 'STATE', 'DALLAS', 'TX'),

(005, 'EVAN', 'CHICAGO', 'IL'),

(006, 'BURG', 'NASHVILLE', 'CO')}

Put all content in one file named Q3.sql below PartB folder.