Lab 10 - Data Driven Development

Answer the following questions.

Instructor-led Demo for JavaDB:

1. Given any requirement, demonstrate insert, update, and select records from JavaDB in an application. This demonstration includes database, table, configuration, connection etc setup.

Exercise for MS Access:

- 1. Create a MS Access database namely, *DemoDB.accdb*.
 - a. Make a <u>Staff</u> table which contains ID, FNAME, LNAME, AGE, DOB, DEPARTMENT, DATE_JOINED, etc.
 - b. Make a <u>Customer</u> table which contains ID, FNAME, LNAME, DOB, USERNAME, PASSWORD, etc.
 - c. Make a <u>Product</u> table which contains ID, CODE, NAME, DESC, COST, RETAIL_PRICE, QUANTITY, etc.

Note: Recommended to put sample data for testing purpose.

- 2. Setup the data source for the accessing the *DemoDB.accdb*.
 - a. Enter to the ODBC Data Source Administrator by either of these ways:
 - i. Start menu → Control Panel → System and Security → Administrative Tools → Data Source (ODBC)
 - ii. Type **Data Source** in the search textbox on the Start menu.
 - b. In the ODBC Data Source Administrator, click Add button.
 - c. Select the driver: Microsoft Access Driver (*.mdb, *.accdb).
 - d. In the <u>ODBC Microsoft Access Setup</u> dialog, enter a DATASOURCE_NAME. Click on **Select** to choose the targeted database, *DemoDB.accdb* in this case. Click **OK**.
 - e. It will then add a new data source for users in the <u>ODBC Data Source</u> Administrator.

Note: The data source name will be used in Database URL in the program.

- 3. Based on *DemoDB.accdb*, answer the following questions:
 - a. Write a program that views, inserts and updates staff information stored in a database.
 - b. Write a program that validates the customer login information. This program prompts the user for username and password input.

Write a program that lists all the product information in an ascending order.