Lab Manual

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EE436L: Database Engineering

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University of Engineering and Technology Lahore 2019
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Name _____
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Lab Title: Data Import and Export in MySQL Workbench

Exercise 1: Show all steps and attach the files that were used to import data and that were populated after exporting data from database

I. **Create a new Database with all the tables as mentioned below:**

- HOTEL (**HotelNo**, hotelName, city)
- GUEST (**GuestNo**, guestName, guestAddress)
- ROOM (**RoomNo, HotelNo**, type, price)
- BOOKING (**HotelNo, GuestNo**, **DateFrom**, DateTo, RoomNo)

INT: HotelNo, guestNo, RoomNo
FLOAT: Price
DateTime: DateFrom, DateTo
Varchar: HotelName, City, guestName, guestAddress, Type

II. **Populate each table with at least 3 rows by importing data from the CSV file**

III. **Transfer the data of at least 2 tables from DB to CSV files**

Exercise 2: Introduction to DDL-DML and Constraints

Data Definition Language (DDL) statements are used to define the database structure or schema. Some examples:

- CREATE - to create objects in the database
- ALTER - alters the structure of the database
- DROP - deletes objects from the database
- TRUNCATE - removes all records from a table, including all spaces allocated for the records are removed

Data Manipulation Language (DML) statements are used for managing data within schema objects. Some examples:

- SELECT - retrieves data from the a database
- INSERT - inserts data into a table
- UPDATE - updates existing data within a table
- DELETE - deletes records from a table, the space for the records remain

Data Control Language (DCL) statements. Some examples:

- GRANT - gives user's access privileges to database
- REVOKE - withdraws access privileges given with the GRANT command

Transaction Control (TCL) statements are used to manage the changes made by DML statements. It allows statements to be grouped together into logical transactions.

- COMMIT - saves work done
- SAVEPOINT - identifies a point in a transaction to which you can later roll back
- ROLLBACK - restores database to original since the last COMMIT

Exercise: Show all steps

I. Create Table Departments with column DepartmentID, DepartmentName, DeptHeadID with DepartmentID as primary key. Set the data types in accordance to the real time scenario.

II. Create Table Employees with column EmployeeID, EmployeeName with EmployeeID as primary key. Set the data types in accordance to the real time scenario.

III. Alter Table Departments by adding new column DepartmentCode.

IV. Insert at least two records in both tables.

V. Develop foreign key relation between two tables.

VI. Implement referential integrity constraint of Set Null on Delete Rule on above relationship.

VII. Implement referential integrity constraint of Set Cascade on Update Rule on above relationship.

Note:

Please zip your report and CSV files and name the zipped folder with your roll no. Please send your zip folder.