## Database Lab

Date: 29th Aug 2019

Submission Filename: assign4.txt

Due Date: 29th Aug 2019 17:00

## 1 Assignment Overview

The learning objective of this assignment is for students to gain experience on writing SQL queries using date, math, string functions and loading data and saving result.

### 2 Task1

Use your previous SP database. In this database, following three tables were already created.

- suppliers <sno varchar(10),sname varchar(10),city varchar(10),phone int(10),email varchar(20)> /\*sno is the primary key\*/
- parts<pno varchar(10),pname varchar(10),weight float(6,2), color varchar(10)> /\*pno is the primary key\*/
- sp < sno varchar(10),pno varchar(10),qty smallint> /\*sno, pno combination is the primary key. Also, sno is a foreign key which refers to suppliers.sno. Again, pno is also a foreign key which refers to parts.pno.\*/

Now make the following changes-

- add dob (date of birth) attribute in suppliers relation
- add dom (date of manufacture) attribute in parts relation
- add dos (date of supply) attribute in sp relation
- update these three new columns with some relevant values
- Now create the sup\_data.txt in the local folder with the following details. Here, the columns indicate sno, sname, city, phone, email and dob respectively. If the following sno.s already exist in the table then you may use different sno.s which are not present in the table.

s8090,	Daksh,	hyderabad,	1234564380,	daksh@gmail.com,	1989-04-18
s8799,	kshitij,	lucknow,	1154576380,	kshitij@gmail.com,	1989-04-30
s8811,	ayush,	udaypur,	1154564380,	ayush@gmail.com,	1984-04-30

- Load the data from sup\_ip.txt into the suppliers table using infile option
- After the loading is done successfully, save the data from suppliers table (you can use *select \* from suppliers*) into a file sup\_op.txt using the *outfile* option.

#### $3 \quad \text{Task } 2$

Now write MySQL query to perform each of the followings. You may have to add required data to test your queries.

- 1. Find the name of the oldest supplier.
- 2. Find the details of the suppliers who are less than 30 years old.
- 3. Show the average age of the suppliers from each city.
- 4. Find the name of the suppliers who have supplied parts in the year 2018.
- 5. Find the name of the suppliers who have supplied parts after 2017-08-14.
- 6. Find the name of the most recently supplied parts.
- 7. Find the name of the suppliers who have supplied at least two parts and one part is supplied within 30 days of supply of previous part.

- 8. If the warranty period is 6 months from the date of supply then show the warranty expiry date of each items supplied.
- 9. Show the name of the suppliers who have supplied more than 2 years old items.
- 10. Display a chart that will show the pno and its weight with asterisks (\*). For example: if the weight is any value in {0,1,2,,9} then use '\*', if the weight is any value in {10,11,12,,19} use '\*\*', if the weight is any value in {20,21,22,,29} use '\*\*\*' and so on.

# 4 Submission

Write all the relevant MySQL queries that you have used to perform Task 1 and Task 2. Also, create a backup file assign4Backup.sql using mysqldump. Use openssl and encrypt the file. Add these commands in your submission file. Submit the queries using a assign4.txt file. While writing the queries, please ensure that you use the table names and attributes as given in the above specification as your queries will be evaluated on identical set of tables and columns. Pls, submit the assignment using the following submission link only.

http://172.16.1.252/~samrat/CS355/submission/