

Database

Date: 22nd Aug 2019

Submission Filename: [assign3.txt](#)

Assignment 3

Due Date: 22nd Aug 2019 17:00

1 Assignment Overview

The learning objective of this assignment is for students to gain experience on writing SQL queries using string functions and taking backup.

2 Task1

Create a database name **SP**. In this database create the following three tables which capture the information related to *suppliers* and *parts* database.

- *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*.*/

Also, make the following assumptions while creating the tables-

- phone numbers are 10 digits. E.g. 9898989897
- values of sno start with char s. e.g. s123,s534, etc.
- values of pno start with char p. e.g. p10,p23, etc.

Once the tables are created then insert a desired set of records in each table.

3 Task 2

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

1. Display only the numbers from *sno*.
2. Show *sno* and *pno* combination as follows - if *sno* is *s123* and *pno* is *p10* then display *sp12310*
3. Display the *sno* where the numerical part is a palindrome
4. Display the *sno* of a given supplier as follows if *sno* is *s123* then display it as *suppl123*
5. Display the phone in xxxxx-xxxxx format
6. For each *sno*, generate a key string which starts with the first two characters of *sname*, followed by last digit of *sno*, followed by 5th and 8th digits of its *phone number* and ends with first character of *city*.
7. Retrieve the domain name of the email of the suppliers. If the email is *abc@gmail.com* then retrieve only gmail.
8. Display the *sno* and *sname* who have supplied atleast a red part.
9. Create a view to list the suppliers (with *sno*, *sname*) who have supplied more than one items.
10. Create a view to show the *pno* and the total quantity supplied in descending order.

4 Submission

Write all the relevant MySQL queries that you have used to perform *Task 2*. Also, create a backup file `assign2Backup.sql` using `mysqldump`. Use `openssl` and encrypt the file. Add these commands in your submission file. Submit the queries using a `assign3.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/>