Database Lab

Date: 12th Sep 2019 Assignment 6
Submission Filename: assign6.txt Due Date: 12th Sep 2019 17:00

1 Overview

The basic objective of this assignment is to learn using the stored procedure and function utility of MySQL. Use the previously created SP database for this assignment. The tables of this database were-

- *suppliers* <sno varchar(10),sname varchar(10),city varchar(10),phone int(10),email varchar(20), dob date> /**sno* is the primary key*/
- *parts*<pno varchar(10),pname varchar(10),weight float(6,2), color varchar(10),dom date> /**pno* is the primary key*/
- *sp*<sno varchar(10),pno varchar(10),qty smallint, dos date> /*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.*/

2 Task 1

Write MySQL queries to perform the the followings-

1. Add a column **status** (datatype varchar(20)) to the *suppliers* table. Create a procedure [name procSupStatus] that will take one *sno* value as input parameter and calculate the age of the corresponding supplier in years. If the age is more than 60 years then it will be treated as senior citizen otherwise it will be treated as non-senior citizen. Now update the supplier's status (either with senior citizen or non-senior citizen) accordingly.
2. Create a procedure [name procPartsInsert] to insert a new row as per the following-
   - The procedure will take values corresponding to *pno*, *name*, *weight*, *color* and there will be one more input parameter *howManyDays*. The parameter *howManyDays* basically indicates how old is the parts from the current date.
   - If the new *pno* does not conflict with the existing one then insert a row corresponding to this new parameter values.
3. Create a procedure [name procSPDateSummary] which takes one date (dt) as input parameter and calculates the list of the unique suppliers who have supplied parts 30 days before and after that given *dt*.
4. Create a function [name funDateKey] that takes a *date* as input parameter and returns a number with 10 digits corresponding to the followings-
   - first four digits are obtained from the extracted year
   - 5th and 6th digits are from the extracted month
   - 7th and 8th digits are fro the extracted day
   - 9th and 10th digits are assigned using a two-digit random numbers generated using random function
5. Create a new table as per below details-
   newKey < supkey varchar(10),doc date> /**supkey* is the primary key and doc indicates date of creating the key*/

   Create a procedure [name procSupKey] that will take *sno* as one input parameter and will try to insert a row corresponding to that supplier in this *newKey* table. To generate a potential *supkey* value, you can use the funDateKey function as defined in the previous question. For *doc* value, you can use *currendate* value.

   If the insertion fails due to duplicate keyvalue then repeat the insertion attempt again by calling the funDateKey again. Try this for atmost 5 times.

3 Submission

Write all the relevant MySQL queries that you have used to perform *Task 1*. Submit the queries using a assign6.txt file. Pls, submit the assignment using the following submission link only.

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