## Database Lab

Date: 29th Oct 2020

Submission Filename: CS355\_assign8.txt

Due Date: 30th Oct 2020 3:00 PM

## 1 Overview

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

- Suppliers <SID varchar(10),SName varchar(10),City varchar(10),DoB date> /\*SID is the primary key\*/
- Products<PID varchar(10),PName varchar(10),WarrantyPeriod smallint, DoM date> /\*PID is the primary key\*/
- SP<SID varchar(10),PID varchar(10),Qty smallint, DoS date> /\*SID, PID combination is the primary key. Also, SID is a foreign key which refers to Suppliers.SID. Again, PID is also a foreign key which refers to Products.PID.\*/

## 2 Task to be Performed

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 *SID* 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 suppliers' status of Suppliers table either with *senior citizen* or *non-senior citizen* using this procedure.
- 2. Create a procedure [name procProdInsert] to insert a new row as per the following-
  - The procedure will take values corresponding to PID, PName, WarrantyPeriod, DoM.
  - If the new *PID* does not conflict with the existing PIDs then insert a new row corresponding to this new parameter values in the Products table.
- 3. Create a procedure [name procSPDateSupply] which takes one date (dt) as input parameter and finds the list of the unique suppliers who have supplied parts 1 year before and after that given dt.
- 4. Create a function [name funSPGenString] that takes a SID and PID as input parameters and returns a number with 10 character string which satisfy the following rules-
  - first 3 characters are obtained from the first three characters of SID
  - next 3 characters are obtained from the first three characters of PID
  - 7th and 8th characters are from the extracted day of the corresponding DoS value
  - 9th and 10th characters are from the last two digits of extracted year of DoS

## 3 Submission

Write all the relevant MySQL queries that you have used to perform *task* given in section 2. Submit the queries using a CS355\_assign8.txt file.