

Database

Date: 24th Oct 2019

Submission Filename: [assign8.txt](#)

Assignment 8

Due Date: 24th Oct 2019 16:59

Assignment Overview

The basic objective of this assignment is to get familiar with *trigger* utility of MySQL. In MySQL, a *trigger* is a set of SQL statements that is invoked automatically when a change is made to the data on the associated table. A trigger can be defined to be invoked either before or after the data is changed by INSERT, UPDATE or DELETE statement.

1 Task 1

For this assignment, initially create the following tables.

- *account* < anum number(5), bname varchar(20), balance number(6) > /* *anum* is the primary key and balance should be ≥ 0 */
- *custAcc* < anum number(5), cname varchar(20) > /* *anum* and *cname* combination is the primary key. */

2 Task 2

Now perform the followings-

1. Create a procedure [name [procAccDummyData](#)] which takes one integer value (N) as input parameter and insert N dummy records in account table. The dummy records must satisfy the constraints used to define the table.
2. Create a withdraw function [name [funWithdraw](#)] which takes *anum* and *amount* as input parameters and check whether sufficient balance is there (from *account* relation) or not and accordingly it subtracts amount from the balance and update the balance. If the amount can be deducted then withdraw function returns the final balance otherwise it returns -1.
3. Now create a trigger (use the standard naming convention i.e. [activation time]-[table name]-[trigger event],) to perform each of the followings
 - a Before insertion operation into *custAcc* table, check whether the *anum* value exists in the *account* relation. If *anum* exists in account table then insert it into the *custAcc* table otherwise print an appropriate error message
 - b For each update operation on *balance* attribute of *account* relation, store the corresponding old balance value in a separate table already created as
 - *accBalanceUpdate* < anum number(5), balance number(6), dou date(date of update), tou timestamp > /* *dou* is date of update and *tou* is time of update */

Now, run the [funWithdraw](#) for several examples and show how they impact on the *accBalanceUpdate* table.

Submission

You need to submit a detailed report ([assign8.txt](#)) describing the steps for performing Task 1 and Task 2. Show the the results to the TAs also. Use only submission module to submit your reports.