-- Triggers

-- 1. Create a table named teachers with fields id, name, subject, experience and salary and insert 8 rows.

create database student;

use student;

create table teachers(

id int primary key,

name varchar(30),

subject varchar(30),

experience int,

salary decimal(10,2)

);

insert into teachers

values

(1, 'Alice', 'Math', 5, 50000),

(2, 'Bob', 'Science', 8, 55000),

(3, 'Carol', 'History', 3, 45000),

(4, 'Dave', 'Math', 12, 60000),

(5, 'Eve', 'Geography', 15, 65000),

(6, 'Frank', 'Science', 4, 52000),

(7, 'Grace', 'Math', 6, 48000),

(8, 'Hank', 'English', 2, 43000)

;

select \* from teachers;

-- 2. Create a before insert trigger named before\_insert\_teacher that will raise an error “salary cannot be negative”

-- if the salary inserted to the table is less than zero.

delimiter //

create trigger before\_insert\_teacher

before insert on teachers

for each row

Begin

if new.salary < 0 then

signal sqlstate '45000'

set message\_text = 'salary cannot be neagtive';

end if;

end //

delimiter ;

-- create teacher\_log table

create table teacher\_log(

teacher\_id int,

action varchar(50),

timestamp datetime

);

-- 3. Create an after insert trigger named after\_insert\_teacher that inserts a row with teacher\_id,action,

-- timestamp to a table called teacher\_log when a new entry gets inserted to the teacher table.

-- tecaher\_id -> column of teacher table, action -> the trigger action, timestamp -> time at which the new row has got inserted.

delimiter //

create trigger after\_insert\_teacher

after insert on teachers

for each row

Begin

insert into teacher\_log( teacher\_id, action, timestamp)

values (new.id, 'insert', now());

end //

delimiter ;

-- 4. Create a before delete trigger that will raise an error when you try to delete a row that has experience greater than 10 years.

delimiter //

create trigger before\_delete\_teacher

before delete on teachers

for each row

Begin

if old.experience > 10 then

signal sqlstate '45000'

set message\_text = 'Cannot delete a teacher with experience greater than 10 years';

end if;

end //

delimiter ;

-- 5. Create an after delete trigger that will insert a row to teacher\_log table when that row is deleted from teacher table.

delimiter //

create trigger after\_delete\_trigger

after delete on teachers

for each row

Begin

insert into teacher\_log (teacher\_id, action, timestamp)

values (old.id, 'Delete', now());

end //

delimiter ;