

Information and Database Management Systems (IDBMS)**Lab Assignment #7**

Consider the social networking database used in Assignment 5 and perform the following:

1. Write a trigger that makes new students named 'Friendly' automatically like everyone else in their grade. That is, after the trigger runs, we should have ('Friendly', A) in the Likes table for every other Highschooler A in the same grade as 'Friendly'.
2. Write one or more triggers to manage the grade attribute of new Highschoolers. If the inserted tuple has a value less than 9 or greater than 12, change the value to NULL. On the other hand, if the inserted tuple has a null value for grade, change it to 9.
3. Write one or more triggers to manage the grade attribute of new Highschoolers. If the inserted tuple has a value less than 9 or greater than 12, change the value to NULL. On the other hand, if the inserted tuple has a null value for grade, change it to 9.
4. Write a trigger that automatically deletes students when they graduate, i.e., when their grade is updated to exceed 12.
5. Write a trigger that automatically deletes students when they graduate, i.e., when their grade is updated to exceed 12 (same as Question 4). In addition, write a trigger so when a student is moved ahead one grade, then so are all of his or her friends.

CREATE TRIGGER FRIENDLY AFTER INSERT ON HIGH SCHOOLER REFERENCING NEW AS N FOR EACH ROW WHEN
(N.NAME='Friendly') BEGIN INSERT INTO LIKES SELECT N.ID, ID FROM HIGH SCHOOLER WHERE N.GRADE=GRADE; END @

CREATE TRIGGER GRADECHANGE AFTER INSERT ON HIGH SCHOOLER REFERENCING NEW AS N FOR EACH ROW WHEN (N.GRADE
IS NULL) BEGIN UPDATE HIGH SCHOOLER SET GRADE=9 WHERE ID=N.ID; END @

CREATE TRIGGER GRADECHANGE2 AFTER INSERT ON HIGH SCHOOLER REFERENCING NEW AS N FOR EACH ROW WHEN
(N.GRADE<9 OR N.GRADE>12) BEGIN UPDATE HIGH SCHOOLER SET GRADE=NULL WHERE ID=N.ID; END @

CREATE TRIGGER FAREWELL AFTER UPDATE ON HIGH SCHOOLER REFERENCING NEW AS N FOR EACH ROW WHEN (N.GRADE>12)
BEGIN DELETE FROM HIGH SCHOOLER WHERE ID=N.ID; END @

CREATE TRIGGER PASS AFTER UPDATE ON HIGH SCHOOLER REFERENCING NEW AS N OLD AS O FOR EACH ROW WHEN
(N.GRADE=O.GRADE+1) BEGIN UPDATE HIGH SCHOOLER SET GRADE=GRADE+1 FROM FRIEND WHERE ID1=N.ID AND ID2=ID; END @