CS4350 Database Systems   HW#5

Name: Loc Nguyen

1. Rewrite the trigger AvgNetWorthTrigger in the lecture notes "Constraints and Triggers" for delete and for insert.

Insert trigger as follows:

```
CREATE TRIGGER AvgNetWorthTrigger
AFTER INSERT ON MovieExec
REFERENCING NEW TABLE AS NewStuff
FOR EACH STATEMENT
WHEN (500000 > (SELECT AVG(netWorth) FROM MovieExec))
BEGIN
DELETE FROM MovieExec
WHERE (name, address, cer#, netWorth) IN NewStuff;
INSERT INTO MovieExec
(SELECT * FROM NewStuff);
END;
```

Delete trigger as follows:

```
CREATE TRIGGER AvgNetWorthTrigger
AFTER DELETE ON MovieExec
REFERENCING OLD TABLE AS OldStuff
FOR EACH STATEMENT
WHEN (500000 > (SELECT AVG(netWorth) FROM MovieExec))
BEGIN
DELETE FROM MovieExec
WHERE (name, address, cer#, netWorth) IN OldStuff;
INSERT INTO MovieExec
(SELECT * FROM OldStuff);
END;
```

2. Consider the database schema :

EMPLOYEE(EmployeeID, EmployeeName, SupervisorID, DepartmentID)

PROJECT (ProjectID, EmployeeID)

DEPARTMENT(Department ID, DepartmentName)

Write a row trigger after insert that allows inserting a new row into the table PROJECT and if the EmployeeID is not exist in the table EMPOLOYEE , the trigger inserts the new EmployeeID into the table EMPLOYEE and sets the other attributes EmployeeName. SupervisorID, DepartmentID to NULL.

```
CREATE TRIGGER AddEmployee
AFTER INSERT ON PROJECT
REFERENCING NEW ROW AS NewEmployee
FOR EACH ROW
WHEN (NewEmployee.EmployeeID NOT IN EMPLOYEE)
INSERT INTO EMPLOYEE
      VALUES(NewEmployee.ID, NULL, NULL, NULL);
```