Metro State University
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Class Assignment 5

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Write SQL statements to answer questions a, b, c and d based on the following schema. Primary keys are(BOLD and italicized) and attributes with the same names in different tables are foreign keys.

Doctors(***doctorId***, doctorName, specialty)
Patients(***patientId***, patientName, sex, patientBalance, numberOfVisits)
Records(***doctorId, patientId***, date, diagnosis, visitCost)

a) Create a view, called DoctorSmithsPatients, to list all the patients Dr. Smith has (be careful on this one).

```
CREATE VIEW DoctorSmithsPatients AS
SELECT P.*
FROM Patients P
INNER JOIN Records R ON P.patientId = R.patientId
INNER JOIN Doctors D ON R.doctorId = D.doctorId
WHERE D.doctorName = 'Dr. Smith';
```

b) Write a trigger, each time a row is inserted in the table Records, the numberOfVisits in the corresponding Patient row is updated by 1 (i.e. add 1 to the numberOfVisits).

```
CREATE TRIGGER UpdateNumberOfVisits
AFTER INSERT ON Records
FOR EACH ROW
BEGIN
   UPDATE Patients
   SET numberOfVisits = numberOfVisits + 1
   WHERE patientId = NEW.patientId;
END;
```

c) Find the cost of the most expensive visit.

```
SELECT MAX(visitCost) AS maxVisitCost
FROM Records;
```

d) For each doctor, list the doctor's identifier, doctor name and the total number of visits that were administered by the doctor.

```
SELECT D.doctorId, D.doctorName, COUNT(R.doctorId) AS totalVisits
FROM Doctors D
LEFT JOIN Records R ON D.doctorId = R.doctorId
GROUP BY D.doctorId, D.doctorName;
```