INF 551 – Fall 2016 (Morning)

Quiz 8: SQL, Constraints, and Views (10 points)

10 minutes

Consider again the tables you have seen in the last quiz. Write an SQL query for each of the following questions.

Laptop(SerialNo, OperatingSystem, HardDrive)
Product(SerialNo, Brand, Model, Price)
Store(ID, Name, City)
Purchase(BuyerName, SellerName, StoreID, SerialNo, Date)
Person(Name, PhoneNumber, City)

1. [4 points] Find the brands which have at least 10 products sold at stores in LA.

    SELECT Brand

    FROM Store, Purchase, Product

    WHERE Store.ID = Purchase.StoreID AND Purchase.SerialNo = Product.SerialNo

       AND Store.City = "LA"

    GROUP BY Brand

    HAVING COUNT(*) >= 10

2. [3 points] List all possible foreign keys in the above table.
    Purchase(BuyerName) -> Person(Name)
    Purchase(SellerName) -> Person(Name)
    Purchase(StoreID) -> Store(ID)
    Purchase(SerialNo) -> Product(SerialNo)
    Laptop(SerialNo) -> Purchase(SerialNo)

3. [3 points] Create a view "LA-sale" that lists, for each store (by name) in LA, the total sales price of products sold at the store.

    CREATE VIEW LA-sale AS

    SELECT Store.Name, SUM(Price) as Total_Price

    FROM Store, Purchase, Product

    WHERE Store.ID = Purchase.StoreID AND Purchase.SerialNo = Product.SerialNo

       AND Store.City = "LA"

    GROUP BY Store.Name