

COMP 2714 – RELATIONAL DATABASE SYSTEMS

Tutorial – DML Basics, Joins, Aggregates

Analysis of the Car Rental Report for AutoRental Franchise Inc. provided the following data requirements information:

Outlet	(<u>outletNo</u>, outletName, outletCity)
Vehicle	(<u>outletNo</u>, <u>vehNo</u>, vehDesc, vehSize, licPlate, dailyRate)
Customer	(<u>custNo</u>, custName, custAddr, driverLic)
Rental	(<u>outletNo</u>, <u>vehNo</u>, <u>startDate</u>, endDate, custNo)

Considering the above relational database schema, write SQL DML statements for the queries below:

1. List all outlet information, in ascending order by city, then by outlet name.
2. List cars for all car sizes except Compact and Midsize, with a daily rate above \$30 per day, giving the outlet number, vehicle number, vehicle size and daily rate. List outlet number in ascending order, then daily rate in descending order.
3. List the vehicle size and daily rate for all vehicles at the Brentwood outlet, in ascending order for vehicle size, then descending order for daily rate.
4. List the names and addresses of all customers living in Vancouver, ordered by name.
5. List all customers who are currently renting a vehicle from the Metrotown outlet, in order of vehicle number.
6. How many different vehicle sizes, and vehicles (i.e. the total number of vehicles), are available at the Brentwood outlet?
7. What is the lowest and the highest rental rate at the Metrotown outlet?
8. What is the average 10-day rental cost for a Compact or Midsize vehicle at the Lougheed outlet?
9. What is the total possible revenue per day from all car rentals priced from \$20.00 to \$60.00 per day?
10. Assume that all old rental rows had been archived and deleted (up till 2014-12-31) from the Rental table (i.e. Rental table contains only rows for current year rentals). What percentage of customers has rented at least once this current year?