## Module 3 Lab

## Lab Notes:

Complete as many of the following problems as you can in the available lab time. Please ask your instructor for help as needed.

Any that you don't complete can be used as self-study aids outside of class. An answer key can be found on your lab machine in the c:\SQLForDA\.

## **Query Problems:**

- 1. Write a query that lists the SaleID, sales date, and sales amount for each car ever sold. Include the Make, Model, Year, Color, and VIN of each car sold.
- 2. Write a query that lists the first name and last name of each customer. Sort the list by last name, then first name.
- 3. Write a query that lists the full name (in the form Lastname, Firstname) of each currently active sales person, along with his or her employee ID. The list should be in alphabetical order by last name, then first name.
- 4. Write a query that lists the makes, models, and years of all cars sold in 2011. The list should not include any duplicates.
- 5. Write a query that lists the name of each customer (in the format Lastname, Firstname) in a column called Customer, along with the marital status, gender, and income bracket of that customer.
- 6. Write a query that lists the sales amount and sales date of each sale in 2010, along with the first name and last name of the sales person making the sale. Sort the list by sales date, with the most recent sale first.
- 7. Write a query that lists the make, model, and year of each car sold, along with the first name and last name of the customer who bought it, the sale price, and the sales date.
- 8. Write a query that lists the make, model, and year of each car sold, the first name and last name of the salesperson who sold it, and the sales date. Include a column named "Commission" that lists a 20% sales commission for each sale.
- 9. Write a query that produces a list of all customer notes entered by the sales person named Royce Selser, along with the full name of the customer and the date the note was entered. The note entered is stored in the Memo field of dbo.CustomerNotes.

NOTE: Table dbo.Person will need to be joined twice - once for sales people and once for customers. Use a different table alias on each JOIN.

The query below shows an example of this. In order to return a list of both the sales person's and customer's name for each sale, we need to join the dbo.Customers table and dbo.SalesPeople tables to seperate instances of the dbo.Person table. We can do this by simply using the dbo.Person table twice, and assigning a different alias each time.

```
SELECT

pe.LastName + ', ' + pe.FirstName as [Sales Person]
,pc.LastName + ', ' + pc.FirstName as [Customer]
,s.SalesDate
,s.SalesAmount

FROM dbo.Sales s
JOIN dbo.SalesPeople sp
ON s.SalesPersonID=sp.EmployeeID
JOIN dbo.Person pe
ON sp.PersonID=pe.PersonID
JOIN dbo.Customers c
ON s.CustomerID=c.CustomerID
JOIN dbo.Person pc
ON c.PersonID=pc.PersonID
```

11. Write a query that lists the make, model, and year of each car sold in 2012, along with full name of the customer who bought the car and the sales person who sold it. Label each column appropriately. Full names should be in the format "Lastname, FirstName". The results should also include the sales price of the car and the sales date. Results should be sorted by the sales date with the most recent date first.