

Module 2 Lab

Notes:

Complete as many of the following query problems as you can in the available lab time. Any that you don't complete can be used as self-study aids outside of class. An answer key can be found in the C:\SQLforDA\LabFiles\Module_2 folder.

Each problem will describe a desired result set and ask you to write a SELECT query to produce it. Be sure to run all queries against your CarDealer Azure SQL database.

Query Problems:

1. Write a query that retrieves records from the dbo.Person table. Preface the column names in the SELECT list with a table alias.

The query should return only the PersonID, FirstName, MiddleInitial, and LastName columns. It should also contain a fifth column named **Full Name**. The "Full Name" column should contain the name in this formation: LastName, FirstName MI

2. Write a query that returns SaleID, SalesDate, and SalesAmount from the dbo.Sales table, along with a column named "10% Commission" that lists 10% of the value of the SalesAmount column. The values in the 10% Commission column should be whole numbers. The column names should be prefaced by a table alias.
3. Write a query that returns a distinct list of blue cars with a year value of 1971 from the cars table. The column names should be prefaced by a table alias. Sort the result set by Make and Model.
4. Select the DemogroupID and IncomeBracket for all rural males in the dbo.CustomerDemographicst table. Be sure to use a table alias.
5. KeyWest Autos wants to calculate the additional revenue they would have made on each car sale if the sales amount were 12% higher. Your query should include only the sale ID, the sales date, the original sales amount, and the sales amount with 12% added to it. Label this last column **SalesAmountPlus12%**. Label the original sales amount column **OriginalSalesAmount**.
6. Write a query that lists the SaleID from the dbo.Sales table. Also include a column named **Month** that lists the month of the sale, a column named **Year** that lists the year of the sale, and a column named **Day** that lists the day of the month of the sale.

The query should only return records for sales that were made in 2011 and were over \$75,000. Sort the results by SalesAmount from highest sale to lowest sale.
7. Write a query that selects all of the people with a Florida address from table dbo.Person. The query should return three columns:

- a. Column 1 should be the PersonID
- b. Column 2 should be the full name of the person in this format: FirstName M LastName. Be sure not to allow an extra space if there is no middle initial. This column should be named Person.
- c. Column 3 should contain the City, State, and Zip in this format: City, ST ZIP. This column should be named Location.

The results should be sorted by City and then within each City by Zip.

8. Write a query that finds every person whose last name starts with the letter S. Your result set should have a PersonID field, a FirstName field, a LastName field, and a MiddleInitial field.

If the person doesn't have a middle initial, give them the middle initial X.

Sort the results by last name in ascending order, and within each last name by first name in descending order.

9. KeyWest Autos wants a list of all Dodge Challengers from the dbo.Cars table. Write a select query to produce this list. Include the year, the VIN, and the dealer price for each Dodge Challenger in the list.

10. SalesPerson 96 recalls making a note in the CustomerNotes table that contained the text "quarter weasel larceny".

He needs to know the CustomerID of the customer he made the note about. Write a query that will find any note associated with SalesPerson 96 that contains the above text string. The query should return the NoteID, the Memo, and the CustomerID.