Assignment 1: SQL Queries

# Prerequisites:

* Install SQLite and download the Chinook sample database

# Objective:

* Understand how to build SQL statements to access data.

Note: To save the scripts you can start by authoring in a text file and then use the .read command to execute the file. To help you write the queries, you can view and download the sample database details and diagram at [SQLite Sample Database And Its Diagram (in PDF format) (sqlitetutorial.net)](https://www.sqlitetutorial.net/sqlite-sample-database/)

# Problem 1: Querying a Single Table

## 1a: Write a Query that returns the following data from the Customers table:

1. FirstName and Last name concatenated into a single column,
2. The Company Name
3. Their city
4. Their state

Order the resulting data by city.

## 1b: Modify your query to only return customers from Canada or the United States

## 1c: Modify your query to only return customers in Canada or the United States whose last name starts with the letter M.

# Problem 2: Joining tables

## 2a: Write a query white returns the following information from the Artist, Albums and Tracks tables:

1. Artist Name
2. Album Title
3. Track Names

Order the results by Artists

## 2b: Modify the previous query so it only returns tracks that have the word “dancing” somewhere in the track name.

## 2c: You have been asked to create a org chart for the company. Create a query that returns two columns one with the employee’s first and last name and the second with their managers first and last name.

Example:

Employee Manager

Nancy Edwards | Andrew Adams

## 2d: When you review the list you notice that the General Manager, Andrew Adams, is not included on the list. Modify your query from 2c: to include Andrew so the record looks as follows: “Andrew Adams reports to himself”

# Problem 3: Aggregation

## 3a: Create a report that that Joins the Albums to Tracks table and returns the title of each album and the number of tracks it contains.

## 3b: Modify your query from 3a so that the report only shows albums that have more than ten tracks.