**SQL Lab**

# Setting up PostgreSQL Chinook

In this section you will begin the process of working with the PostgreSQL Chinook database

Task – Open the Chinook\_Postgresql.sql file and execute the scripts within. I recommend creating a schema first so that you can keep this data separate from your project data (and so that you can easily drop the schema when you’re done and free up the space on your database). Keep in mind that the script might run fairly slowly if you’re running it on an AWS RDS, so don’t panic if it takes a while.

## 2.0 SQL Queries

In this section you will be performing various queries against the PostgreSQL Chinook database.

## 2.1 SELECT

Task – Select all records from the Employee table.

Task – Select all records from the Employee table where last name is King.

Task – Select all records from the Employee table where first name is Andrew and REPORTSTO is NULL.

## 2.2 ORDER BY

Task – Select all albums in Album table and sort result set in descending order by title.

Task – Select first name from Customer and sort result set in ascending order by city

## 2.3 INSERT INTO

Task – Insert two new records into Genre table

Task – Insert two new records into Employee table

Task – Insert two new records into Customer table

## 2.4 UPDATE

Task – Update Aaron Mitchell in Customer table to Robert Walter

Task – Update name of artist in the Artist table “Creedence Clearwater Revival” to “CCR”

## 2.5 LIKE

Task – Select all invoices with a billing address like “T%”

## 2.6 BETWEEN

Task – Select all invoices that have a total between 15 and 50

Task – Select all employees hired between 1st of June 2003 and 1st of March 2004

## 2.7 DELETE

Task – Delete a record in Customer table where the name is Robert Walter (There may be constraints that rely on this, find out how to resolve them).

# 3.0 Transactions

In this section you will be working with transactions. Transactions are usually nested within a stored procedure.

Task – Create a transaction that given a invoiceId will delete that invoice (There may be constraints that rely on this, find out how to resolve them).

# 4.0 JOINS

In this section you will be working with combining various tables through the use of joins. You will work with outer, inner, right, left, cross, and self joins.

## 4.1 INNER

Task – Create an inner join that joins customers and orders and specifies the name of the customer and the invoiceId.

## 4.2 OUTER

Task – Create an outer join that joins the customer and invoice table, specifying the CustomerId, firstname, lastname, invoiceId, and total.

## 4.3 RIGHT

Task – Create a right join that joins album and artist specifying artist name and title.

## 4.4 CROSS

Task – Create a cross join that joins album and artist and sorts by artist name in ascending order.

## 4.5 SELF

Task – Perform a self-join on the employee table, joining on the reportsto column.