**SQL Lab**

# Setting up Oracle Chinook

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

Task – Open the Chinook\_Oracle.sql file and execute the scripts within.

## 2.0 SQL Queries

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

## 2.1 SELECT

Task – Select all records from the Employee table.

SELECT \* FROM EMPLOYEE;

-- Selects everything form the EMPLOYEE table

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

SELECT \* FROM EMPLOYEE WHERE LASTNAME = 'King';

-- Selects records with last name King

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

SELECT \* FROM EMPLOYEE WHERE FIRSTNAME = 'Andrew' and REPORTSTO IS null;

--Selects Andrews that has a null value in REPORTSTO

## 2.2 ORDER BY

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

SELECT \* FROM ALBUM ORDER BY TITLE DESC;

--Output records with ordering of Titles in descending order

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

SELECT FIRSTNAME FROM CUSTOMER ORDER BY CITY ASC;

-- Displays the first names of people from city in ascending order

## 2.3 INSERT INTO

Task – Insert two new records into Genre table

SELECT \* FROM GENRE;

INSERT INTO Genre VALUES (26, 'Zack');

INSERT INTO Genre VALUES (27, 'Zachary');

-- new records add for Genre

Task – Insert two new records into Employee table

SELECT \* FROM EMPLOYEE;

INSERT INTO EMPLOYEE VALUES(9,'Diaz','Zachary','Engineer',4,TO\_DATE('1992-10-6 00:00:00','yyyy-mm-dd hh24:mi:ss'),TO\_DATE('2016-10-10 00:00:00','yyyy-mm-dd hh24:mi:ss'),'2020 5thst','City','TX','United States','T2Z 3T5','972-999-9899','972-555-5678','diaz@testmail.com');

INSERT INTO EMPLOYEE VALUES(10,'Diaz','Jesse','Engineer',4,TO\_DATE('1970-2-2 00:00:00','yyyy-mm-dd hh24:mi:ss'),TO\_DATE('2016-10-10 00:00:00','yyyy-mm-dd hh24:mi:ss'),'2020 5thst','City','TX','United States','T2Z 3T5','972-933-9339','972-555-3434','diaz@testmail.com');

-- adds 2 more records in Employee Table

Task – Insert two new records into Customer table

SELECT \* FROM CUSTOMER;

INSERT INTO CUSTOMER VALUES(60,'Zachary','Diaz','Tech Mart','1231 drageington', 'Plano','TX','Spain','12987','999-888-7777',null,'test@testmail.com',3);

INSERT INTO CUSTOMER VALUES(61,'Tom','Jack','Tech Mart','1231 drageington', 'Plano','TX','Spain','12987','111-222-3333',null,'tes33t@testmail.com',3);

-- adds 2 more records in Customer

## 2.4 UPDATE

Task – Update Aaron Mitchell in Customer table to Robert Walter

SELECT \* FROM CUSTOMER WHERE FIRSTNAME = 'Aaron' AND LASTNAME = 'Mitchell';

UPDATE CUSTOMER

SET FIRSTNAME = 'Robert', LASTNAME = 'Walter'

WHERE FIRSTNAME = 'Aaron' AND LASTNAME = 'Mitchell';

SELECT \* FROM CUSTOMER WHERE FIRSTNAME = 'Robert' AND LASTNAME = 'Walter';

-- Update the current record with a change in name.

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

SELECT \* FROM ARTIST WHERE NAME='Creedence Clearwater Revival';

UPDATE ARTIST

SET NAME = 'CCR'

WHERE NAME='Creedence Clearwater Revival';

SELECT \* FROM ARTIST WHERE NAME='CCR';

-- Updates the current record with name change

## 2.5 LIKE

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

SELECT \* FROM INVOICE WHERE BILLINGADDRESS LIKE'T%';

-- Selects record that have Billing Address that start with th elette T

## 2.6 BETWEEN

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

SELECT \* FROM INVOICE WHERE TOTAL BETWEEN 15 AND 50;

-- Shows records invoice that spent more then $15 and less then $50

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

SELECT \* FROM EMPLOYEE WHERE HIREDATE BETWEEN TO\_DATE('2003-6-1 00:00:00','yyyy-mm-dd hh24:mi:ss') AND TO\_DATE('2004-3-1 00:00:00','yyyy-mm-dd hh24:mi:ss');

-- Outputs records that hire dates 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).

DELETE FROM CUSTOMER

WHERE FIRSTNAME = 'Robert' AND LASTNAME = 'Walter';

--- I know this does not work but not sure how to delete all child’s that this can be linked too

# 7.0 JOINS

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

## 7.1 INNER

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

SELECT FIRSTNAME,LASTNAME,INVOICEID FROM CUSTOMER

INNER JOIN INVOICE

ON CUSTOMER.CUSTOMERID = INVOICE.CUSTOMERID;

--Select full name and invoid from two tables

## 7.2 OUTER

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

SELECT FIRSTNAME,LASTNAME,INVOICEID,TOTAL

FROM CUSTOMER

FULL OUTER JOIN INVOICE

ON CUSTOMER.CUSTOMERID = INVOICE.CUSTOMERID;

-- IMPLEMENTS FULL OUTER JOIN

## 7.3 RIGHT

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

SELECT NAME,TITLE

FROM ALBUM

RIGHT JOIN ARTIST

ON ALBUM.ARTISTID = ARTIST.ARTISTID;

--Joins two table together

## 7.4 CROSS

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

SELECT \*

FROM ALBUM

CROSS JOIN ARTIST

ORDER BY NAME ASC;

-- Cross joins implements on two tables

## 7.5 SELF

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

SELECT e.FIRSTNAME,m.LASTNAME

FROM EMPLOYEE e

INNER JOIN

EMPLOYEE m ON m.EMPLOYEEID = e.REPORTSTO;

--I think this is what the Q wants