Lab 01

Objectives:

The purpose of the first lab of DBS211 is to familiarize yourself with the User Interface, SQL Developer, that we will be using throughout the course to communicate with the Oracle server. By the end of this lab you should be able to:

Revised: SUMMER 2022

- Successfully establish a connection with and login to the Oracle database server using SQL Developer
- Run the sample database creation script
- Navigate SQL Developer to view the tables created, their structure and the data contained within them.

Preface:

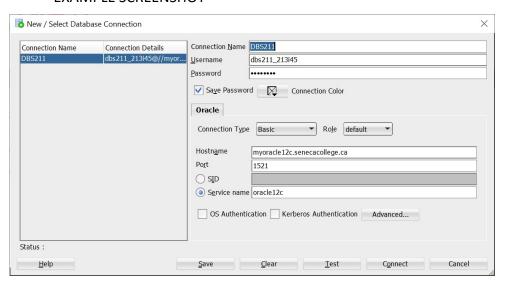
If you have not already done so, you will need to download the sample database creation script from blackboard and run it. These instructions are included in the W01 - Getting Started with SQL Developer document.

LAB 01 - SUBMISSION

Explore the Database

Answer the following questions in the SQL Developer Worksheet area and submit a Word document the screenshots of the SQL results.

- Your Header of the Word file should include FULL NAME, STUDENT ID and EMAIL.
- The first screenshot of this lab should include the screenshot of your database login settings of your login information screen and the tables created.
- The following questions in your Word document should have the question, followed by the statement used or the answer in words and if it has a result in SQL Developer please paste the screenshot.
- EXAMPLE SCREENSHOT

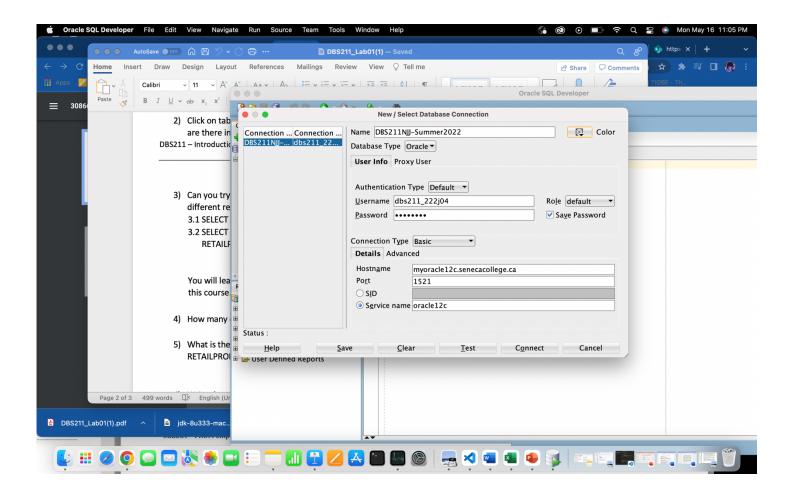


DBS211 – Introduction to Database Systems

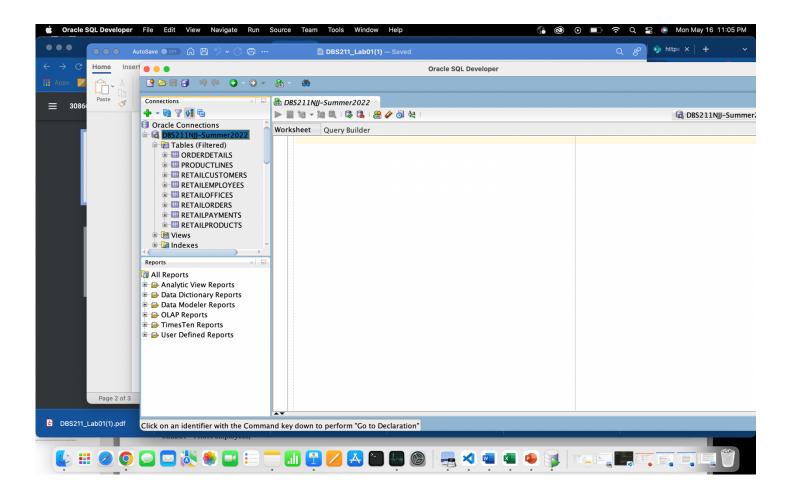
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SOME SNAPSHOTS:-

i. DATABASE LOGIN SETTINGS WITH MY LOGIN INFORMATION :-



ii. TABLES CREATED WITH THE SAMPLE SCRIPT:-



- 1) How many tables have been created? List the names of the created tables.
- → There are in total 8 tables created. The tables created are -
 - 1. ORDERDETAILS,
 - 2. PRODUCTLINES,
 - 3. RETAILCUSTOMERS,
 - 4. RETAILEMPLOYEES,
 - 5. RETAILOFFICES,
 - 6. RETAILORDERS,
 - 7. RETAILPAYMENTS, and
 - 8. RETAILPRODUCTS.
- 2) Click on table **RETAILPRODUCTS**. Click on the Data tab near the top of the worksheet. How many rows are there in the table RETAILPRODUCTS?

There are total 110 rows in the table RETAILPRODUCTS.

- 3) Can you try the following SQL statement and write down how many results were displayed. Was it different results for all 3?
 - 3.1 SELECT * FROM RETAILPAYMENTS;
 - 3.2 SELECT count(*) FROM RETAILPAYMENTS; 3.3 SELECT count(1) FROM RETAILPAYMENTS;
- → Yes, I successfully executed the above SQL statement on Oracle SQL Developer.

The result was 273 rows selected and it was same for all the three queries(statements).

You will learn how to select rows and columns from a table by writing SQL select statements later in this course.

- 4) How many columns does the REATAILOFFICES table have? List the column names.
- → There are total 9 columns in the RETAILOFFICES table.

Column names :-

- 1. OFFICECODE
- 2. CITY
- 3. PHONE
- 4. ADDRESSLINE1
- 5. ADDRESSLINE2
- 6. STATE
- 7. COUNTRY
- 8. POSTALCODE
- 9. TERRITORY

- 5) What is the value of PRODUCTNAME and PRODUCTLINE for **PRODUCTCODE S18_1129** in RETAILPRODUCTS table.
- → PRODUCTNAME 1993 Mazda RX-7
- → PRODUCTLINE Classic Cars
- 6) Write the number of rows and columns for REATILORDERS and ORDERDETAILS tables in the following format.

<u>Table Name</u>	<u>Rows</u>	<u>Columns</u>
RETAILORDERS	_326	7
ORDERDETAILS	2996	5

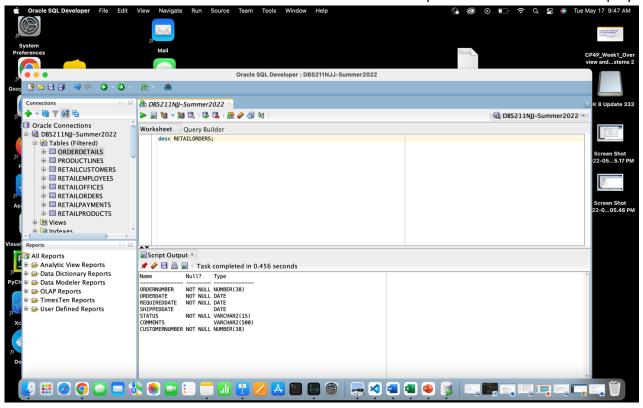
- 7) Right Click on the ORDERDETAILS table and choose tables/count rows. How many rows does the order details table include?
- → ORDERDETAILS table contains 2996 rows.
- 8) Write the following SQL statement in a new SQL worksheet.

desc RETAILORDERS;

You can also write

describe RETAILORDERS;

What is the result of the statement execution? Take a snap shot of the results and display them

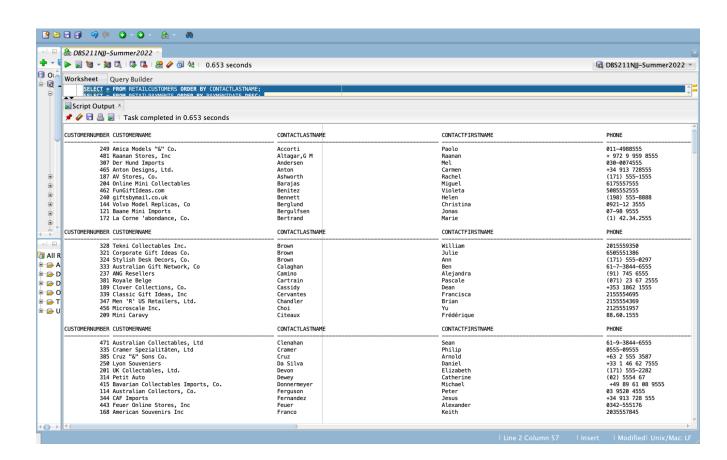


9) Type the following statements in, execute them, then briefly describe what the statement is doing!. Take a snap shot of the results and display them

SELECT * FROM RETAILCUSTOMERS ORDER BY CONTACTLASTNAME;

The above statement, when executed, selects and retrieves all the rows from the table "RETAILCUSTOMERS" and also displays those rows in the output screen, in alphabetical order as per the "CONTACTLASTNAME" data of the table.

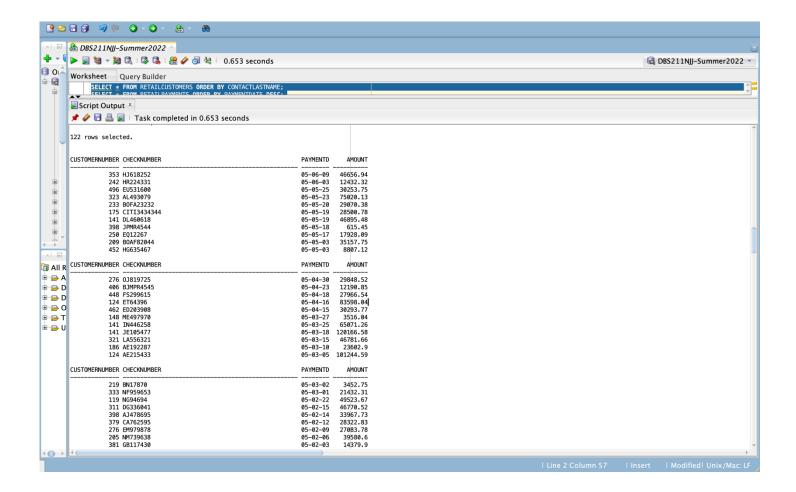
SNAPSHOT :-



SELECT * FROM RETAILPAYMENTS ORDER BY PAYMENTDATE DESC;

The above statement, when executed, selects and retrieves all the rows from the table "RETAILPAYMENTS" and also displays those rows in the output screen, in ascending order as per the "PAYMENTDATE" data of the table.

SNAPSHOT :-



- 10) How many constraints does the RETAILPRODUCTS table have?
- → There are in total 11 constraints, in the table "RETAILPRODUCTS".