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:

- 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.
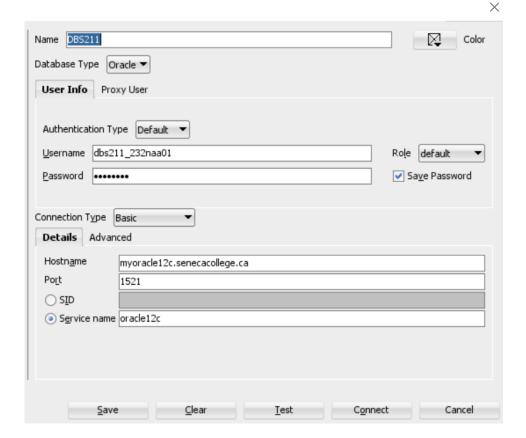
Preface:

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 capturing 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.

1) How many tables have been created? List the names of the created tables.

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ORDERDETAILS
PRODUCTLINES
RETAILCUSTOMERS
RETAILEMPLOYEES
RETAILOFFICES
RETAILORDERS
RETAILPAYMENTS
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?

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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;

	CUSTOMERNUMBER	CHECKNUMBER	PAYMENTDATE	AMOUNT
1	103	HQ336336	19-OCT-04	6066.78
2	103	JM555205	05-JUN-03	14571.44
3	103	OM314933	18-DEC-04	1676.14
4	112	BO864823	17-DEC-04	14191.12
5	112	HQ55022	06-JUN-03	32641.98
6	112	ND748579	20-AUG-04	33347.88
7	114	GG31455	20-MAY-03	45864.03
8	114	MA765515	15-DEC-04	82261.22
9	114	NP603840	31-MAY-03	7565.08
10	114	NR27552	10-MAR-04	44894.74
11	119	DB933704	14-NOV-04	19501.82
12	119	LN373447	08-AUG-04	47924.19
13	119	NG94694	22-FEB-05	49523.67
14	121	DB889831	16-FEB-03	50218.95
15	121	FD317790	28-OCT-03	1491.38
16	121	KI831359	04-NOV-04	17876.32

3.2 SELECT count(*) FROM RETAILPAYMENTS;
COUNT(*)

    273
3.3 SELECT count(1) FROM RETAILPAYMENTS;

COUNT(1)

    273

All 3 statements gave the same result. 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 RETAILOFFICES table have? List the column names.
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	COLUMN_NAME
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.

1993 Mazda RX-7   Classic Cars

6) Write the number of rows and columns for REATILORDERS and ORDERDETAILS tables in the following format.

Table Name   Rows   Columns

_____   _____   _____

_____   _____   _____

Table Name	Rows	Columns
ORDERDETAILS	2996	5
REATAILORDERS	326	7

7) Right Click on the ORDERDETAILS table and choose tables/count rows. How many rows does the order details table include?

2996

8) Write the following SQL statement in the new tab.

```
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

```
Name          Null?   Type

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ORDERNUMBER    NOT NULL NUMBER(38)

ORDERDATE      NOT NULL DATE

REQUIREDDATE   NOT NULL DATE

SHIPPEDDATE            DATE

STATUS         NOT NULL VARCHAR2(15)

COMMENTS               VARCHAR2(500)

CUSTOMERNUMBER NOT NULL NUMBER(38)
```

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;
```

```
SELECT * FROM RETAILPAYMENTS ORDER BY PAYMENTDATE DESC;
```

	CUSTOMERNUMBER	CUSTOMERNAME	CONTACTLASTNAME	CONTACTFIRSTNAME	PHONE	ADDRESS
1	103	Atelier graphique	Schmitt	Carine	40.32.2555	54, ru
2	112	Signal Gift Stores	King	Jean	7025551838	8489 S
3	114	Australian Collectors, Co.	Ferguson	Peter	03 9520 4555	636 St
4	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, ru
5	121	Baane Mini Imports	Bergulfsen	Jonas	07-98 9555	Erling
6	124	Mini Gifts Distributors Ltd.	Nelson	Susan	4155551450	5677 S
7	125	Havel "&" Zbyszek Co	Piestrzeniewicz	Zbyszek	(26) 642-7555	ul. F:
8	128	Blauer See Auto, Co.	Keitel	Roland	+49 69 66 90 2555	Lyoner
9	129	Mini Wheels Co	Murphy	Julie	6505555787	5557

	RESSLINE2	CITY	STATE	POSTALCODE	COUNTRY	SALESREPEMPLOYEENUMBER	CREDITLI
1	1)	Nantes	(null)	44000	France	1370	210
2	1)	Las Vegas	NV	83030	USA	1166	718
3	l 3	Melbourne	Victoria	3004	Australia	1611	1173
4	1)	Nantes	(null)	44000	France	1370	1182
5	1)	Stavern	(null)	4110	Norway	1504	817
6	1)	San Rafael	CA	97562	USA	1165	2105
7	1)	Warszawa	(null)	01-012	Poland	(null)	
8	1)	Frankfurt	(null)	60528	Germany	1504	597
9	1)	San Francisco	CA	94217	USA	1165	646
10	1)	NYC	NY	10022	USA	1323	1149

	CUSTOMERNUMBER	CHECKNUMBER	PAYMENTDATE	AMOUNT
1	363	IS232033	16-JAN-03	10223.83
2	128	DI925118	28-JAN-03	10549.01
3	181	GQ132144	30-JAN-03	5494.78
4	121	DB889831	16-FEB-03	50218.95
5	145	JJ246391	20-FEB-03	53959.21
6	141	JN722010	25-FEB-03	40206.2
7	278	GP636783	02-MAR-03	52151.81
8	385	EK785462	09-MAR-03	51001.22
9	131	CL442705	12-MAR-03	22292.62
10	486	JB117768	20-MAR-03	25833.14
11	187	KL124726	27-MAR-03	48425.69
12	144	LA685678	09-APR-03	7674.94
13	129	PI42991	09-APR-03	16537.85
14	124	CQ287967	11-APR-03	11044.3
15	424	LM271923	16-APR-03	21665.98
16	281	CC475233	10 APR 03	1627 56

All the Retailcustomers data are displayed by contactlastname's ascending order.

All the Retailpayments data are displayed by paymentdate's descending order.

10) How many constraints does the RETAILPRODUCTS table have?

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CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION
PROD_LINE_FK	Foreign_Key	
SYS_C001662969	Check	PRODUCTCODE IS NOT NULL
SYS_C001662970	Check	PRODUCTNAME IS NOT NULL
SYS_C001662971	Check	PRODUCTLINE IS NOT NULL
SYS_C001662972	Check	PRODUCTSCALE IS NOT NULL
SYS_C001662973	Check	PRODUCTVENDOR IS NOT NULL
SYS_C001662974	Check	PRODUCTDESCRIPTION IS NOT NULL

SYS_C001662975	Check	QUANTITYINSTOCK IS NOT NULL
SYS_C001662976	Check	BUYPRICE IS NOT NULL
SYS_C001662977	Check	MSRP IS NOT NULL
SYS_C001662978	Primary_Key	