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.

# LAB 01 - SUBMISSION

## Explore the Database

Answer the following questions in the SQL Developer Worksheet area. Use comment blocks for answers that are not running code.

In the connections window, expand **Tables.**

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

Ans: 8 tables have been created.

CUSTOMERS

EMPLOYEES

OFFICES

ORDERDETAILS

ORDERS

PAYMENTS

PRODUCTLINES

PRODUCTS

1. Click on table **customers**. Click on the Data tab near the top of the worksheet. How many rows are there in the table **customers**?

Ans: There are 122 rows in the table CUSTOMERS.

1. What SQL statement would return the same results. Write the statement in the .sql file and execute it.   
     
   You will learn how to select rows and columns from a table by writing SQL select statements later in this course.

Ans: SELECT \* FROM customers;

1. How many columns does the **customers** table have? List the column names.

Ans: There are 13 columns in the table CUSTOMERS.

CUSTOMERNUMBER

CUSTOMERNAME

CONTACTLASTNAME

CONTACTFIRSTNAME

PHONE

ADDRESSLINE1

ADDRESSLINE2

CITY

STATE

POSTALCODE

COUNTRY

SALESREPEMPLOYEENUMBER

CREDITLIMIT

1. What is the value of each column in the first row in table **customers**? Write the column name and the column data type in addition to the value.

Ans:

COLUMN\_NAME DATA\_TYPE NULLABLE DATA\_DEFAULT COLUMN\_ID COMMENTS

CUSTOMERNUMBER NUMBER(38,0) No (null) 1 (null)

1. Write the number of rows and columns for the rest of the tables in your schema. Format it something like the following.

Table Name Rows Columns

EMPLOYEES\_ \_23\_\_ \_\_\_8\_\_\_  
OFFICES\_\_\_\_ \_\_7\_\_ \_\_\_9\_\_\_

ORDERDETAILS \_2996\_ \_\_\_5\_\_\_

ORDERS\_\_\_\_ \_\_326\_\_ \_\_\_7\_\_\_\_

PAYMENTS\_\_\_ \_\_273\_\_\_ \_\_\_4\_\_\_\_

PRODUCTLINES \_\_\_7 \_\_ \_\_\_4\_\_\_\_

PRODUCTS\_\_\_ \_\_110\_\_\_ \_\_\_9\_\_\_\_

1. Right Click on the **orderdetails** table and choose tables/count rows. How many rows does the order details table include?

Ans: 2996

1. Write the following SQL statement in the new tab.

desc offices;

You can also write

describe offices;

What is the result of the statement execution?

Ans: Script Output is

SQL> describe offices;

Name Null? Type

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OFFICECODE NOT NULL VARCHAR2(10)

CITY NOT NULL VARCHAR2(50)

PHONE NOT NULL VARCHAR2(50)

ADDRESSLINE1 NOT NULL VARCHAR2(50)

ADDRESSLINE2 VARCHAR2(50)

STATE VARCHAR2(50)

COUNTRY NOT NULL VARCHAR2(50)

POSTALCODE NOT NULL VARCHAR2(15)

TERRITORY NOT NULL VARCHAR2(10)

1. Type the following statements in, execute them, then briefly describe what the statement is doing!

SELECT \* FROM employees;

SELECT \* FROM customers ORDER BY ContactLastName;

Ans:-

SELECT \* FROM employees;

SELECT: This command is used to select data from a database.

\*: The asterisk symbol here represents all columns in the table.

FROM: This keyword specifies the table from which to retrieve the data.

employees: This is the name of the table from which we're retrieving the data.

So, when I execute this statement, it retrieve all the data from every column in the `employees` table.

SELECT \* FROM customers ORDER BY ContactLastName;

SELECT: This command is used to select data from a database.

\*: The asterisk symbol here represents all columns in the table.

FROM: This keyword specifies the table from which to retrieve the data.

customers: This is the name of the table where customer data is stored.

ORDER BY: This clause is used to sort the result set of a query by one or more columns.

ContactLastName: This is the column by which the results will be sorted.

1. How many constraints does the **products** table have?

Ans: 11

1. Set the font size in the worksheet editor to a size that is best for you. (Hint: Tools/Preferences)

A screenshot of a computer

Description automatically generated