CIS4133 Spring 2019 Lab 3
1-Table SELECT

1. Objectives

This lab will help you to learn

- How to use the tool Oracle SQL Developer
- How to retrieve data from a single table

2. Tasks to Complete

Complete the questions about 1-table SELECT queries on the MGS Database included in the later part of this document. These queries use the tables in user mgs. This part is **required to submit by 5pm, Tuesday, Feb. 5**.

NOTE: the links to online Oracle SQL Language references are available in the Lecture Notes folder on the blackboard.

NOTE: The scripts you need in this practice can be downloaded from the item "*Murach Book Example Code*" in the Lecture Notes folder on the blackboard.

3. Submission Requirements

Please place your SQL statements in a text file with the extension .sql. Mark each query based on the question number. Write your FULL name on the first page.

Then submit this SQL script file by attaching it to the link Lab 3 in folder Assignments\Labs on Canvas.

Remember that only the last task is **required to submit by 5pm, Tuesday, Feb. 5**.

Single-Table SELECT queries on MGS Database

1. Print the product code, product name, listing price, and discount percentage of all products in the increasing order of discount percentage first, then decreasing order of listing prices.
   NOTE: remember to build and test a statement one clause at a time. First build and test SELECT and FROM clauses, then add ORDER BY clause.

2. Print the full names of all customers whose last names begins with letters from L to Y in the increasing order of last names.
   Display the query result in the following format:
   Heading of the query result: `Customer Names`
   Data format: last name, then a comma and a space, then first name, like below:
   `Trump, Donald`

3. Print the product names, listing prices, and dates when the products were added for products whose listing prices are higher than $200 and lower than $800. Print the products added last (i.e. latest product) first, the products added earliest (i.e. oldest product) last.
   HINT: need to sort the query result by date values.

4. Print at most 5 products' names, listing prices, the actual prices after discounts in the decreasing order of the actual prices in the following format. These 5 products are NOT necessarily the 5 most expensive products.
   HINT: need to sort the query result by an expression, and use a pseudo-column to limit the number of rows in the query result.

```
Product Info
-----------------------------------------
Gibson SGwas $2517, now is $1208.16
Gibson Les Paulwas $1199, now is $839.3
……
```

5. Print the item ids, item prices before discount, item discount amount, total item prices before discount, and the total discount amounts of the item for only items having the total discount amount more than $600.
   Display the total item price as TOTAL_BEFORE_DISCOUNT, the total discount amounts as TOTAL_DISCOUNT_AMOUNT.
   Sort the query result in the decreasing order of the total discount amount.

6. Print the order ids, customer ids, dates when orders were placed, and the shipping amounts for all orders whose shipping dates are unknown.

7. Print a greeting message like below. You must print the heading as is and the date when the query is executed.

```
GREETING
------------------------
Hello! Today is 29-JAN-19
```

8. Given an ipad at $650, the tax rate 8%, print the price before tax, tax rate, tax amount, the price after tax like below.

```
PRICE_BEFORE_TAX  TAX_RATE  TAX_AMOUNT     PRICE_AFTER_TAX
-------------------------------------------------------------
650               0.08      52             702
```