**Lab 01 – Week 2 (Single-row Functions)**

This week’s lab continues using the SELECT command and learning the interfaces for both SQL Developer and introduces the use of single-line functions.

Submission

***Your submission will be a single text-based SQL file with appropriate header and commenting. Please ensure your file runs when the entire file is executed in SQL Developer.***

Create a new Worksheet in SQL Developer. Save the file as L01\_ID#\_LASTNAME.sql

Your submission needs to be commented and include the question, the solutions.

Do not comment the solutions (SQL Statements).

**Tasks**

-- **Q1:** Write a query to display the tomorrow’s date in the following format:  
 January 10th of year 2019  
the result will depend on the day when you RUN/EXECUTE this query. Label the column “Tomorrow”.  
  
***Advanced Option*:** Define an SQL variable called “tomorrow”, assign it a value of tomorrow’s date and use it in an SQL statement.

Here the question is asking you to use a Substitution variable. Instead of using the constant values in your queries, you can use variables to store and reuse the values.

**See the following example:**

**select \***

**from employees**

**where employee\_id = 107;**

**You can also have the following code:**

**define emp\_id number = 107;**

**select \***

**from employees**

**where employee\_id = &emp\_id;**

**After you use the variable, you can undefined the variable:**

**undefine emp\_id;**

**Define a variable of type datetime:**

**define toay datetime = sysdate; -- Assigning current daye to the today variable.**

-- **Q2:** For each product in category 2, 3, and 5, show product ID, product name, list price, and the new list price increased by 2%. Display a new list price as a whole number.

In your result, add a calculated column to show the difference of old and new list prices.

-- **Q3:** For employees whose manager ID is 2, write a query that displays the employee’s Full Name and Job Title in the following format:

SUMMER, PAYNE is Public Accountant.

-- **Q4:** For each employee hired before October 2016, display the employee’s last name, hire date and calculate the number of YEARS between TODAY and the date the employee was hired.

* Label the column Years worked.
* Order your results by the number of years employed. Round the number of years employed up to the closest whole number.

-- **Q5:** Display each employee’s last name, hire date, and the review date, which is the first Tuesday after a year of service, but only for those hired after 2016.

* Label the column REVIEW DAY.
* Format the dates to appear in the format like:  
   TUESDAY, August the Thirty-First of year 2016
* Sort by review date

-- **Q6:** For all warehouses, display warehouse id, warehouse name, city, and state. For warehouses with the null value for the state column, display “unknown”.

Example Submission

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
-- Name: Your Name  
-- ID: #########  
-- Date: The current date  
-- Purpose: Lab 1 DBS311  
-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
  
-- Question 1 – write a brief note about what the question is asking  
-- Q1 SOLUTION --  
  
SELECT \* FROM TABLE;

-- Question 2 –   
-- Q2 Solution –

SELECT \* FROM TABLE;