## Assignment 3 (50 points) Due Date: Monday, February 3<sup>rd</sup>, 2020 11:59 PM

## **Objectives**

This assignment focuses on the SELECT statements. The basis for the majority of database interactions is the SELECT statement. A database contains data as values for each field in a database. The SELECT statement enables the user to retrieve information from the database. Use the following operators in the WHERE clause.

- IS NULL
- IS NOT NULL
- IN (list)
- NOT IN (list)
- BETWEEN exp1 AND exp2
- The comparison operators (=, <>, !=, >=, <=)
- LIKE
- wildcards, NOT, OR, AND (as a logical operator).

This assignment uses the tables accompanying with the *bookstore* database.

## **Additional Files**

- create\_schema\_bookstore.sql
- create\_tables\_bookstore.sql
- insert\_data\_bookstore.sql

Write SQL statements to perform the following queries:

- **Query 1:** Display the rows from the customer table where the customer ID is between 44449 and 88889. Display each customer's last name, first name, and customer ID.
- Query 2: Display all employees who DO NOT earn exactly \$3,400 or \$6,000 and who have a last name that begins with the letter 'V'.

Display each employee's first name, last name, and salary.

**Query 3:** Display these columns from the orders table:

order ID The order\_id column
order date The order\_date column
ship date The ship\_date column

Return only the rows where the ship\_date column contains a null value.

- **Query 4:** Display all customers whose first name contains the letter pattern "an". Display each customer's last name and first name. Sort the result set in descending order by the last name column.
- **Query 5:** Display these columns from the product table:

product ID The product\_id column
product name The product\_name column
product price The list\_price column

Return only the rows with a list price that's greater than \$150.00 and less than \$750.00.

**Query 6:** Display these columns from the orders table:

order ID The order\_id column
order date The order\_date column

When you have this working, add a WHERE clause that retrieves just the orders for April 2015. Sort the result set in descending order by the order date column.

Use three different methods: a) a range operator, b) a logical operator, and c) a search pattern operation.

Sort the result set in descending order by the order date column.

**Query 7:** Display these columns from the orders table:

order ID The order\_id column ship date The ship\_date column

Add a WHERE clause that retrieves just the orders shipped after March 10, 2015.

**Query 8:** Display these columns from the orders table:

order ID The order\_id column
order date The order\_date column

Add a WHERE clause that retrieves just the orders placed on or before April 1, 2015?

Query 9: Use a search pattern to find any product's name with "D" for the first letter and "L" for the third letter. List each product ID, product code, and product name.

Sort the list by product code in descending order.

**Query 10:** A customer service representative is trying to identify all products in the category 21 or 31 and provided by vendor 9 or vendor 5. However, the results shouldn't include any product selling for less than \$1100.00 (list\_price).

Display product\_id, category\_id, vendor\_id, and list\_price.

- Query 11: Display all orders that were not shipped for at least two days after the order was received.
- **Query 12:** Display all orders placed by the customers that have shipped. Display each order ID, customer ID, and order date.
- **Query 13:** Display the unique combinations of order number and order quantity included in the orderitems table.
- **Query 14:** Display the orders placed since 10/24/2011. Display both the order\_id and order\_date columns.

## **Submission Instructions:**

- For each of the queries above, submit the query and the result from running the query. Please use the provided SOL file to write your submissions.
- You will need to label your assignment with your first initial, last name, and the name of the assignment.
   Example: hibrahim\_assignment3.sql and hibrahim\_assignment3.txt
- Zip the files to upload to Canvas. Example: hibrahim\_assignment3.zip
- Submit the zipped file containing the script and output TXT via Canvas.
- Read your output TXT file before you submit it.