CEGEP VANIER COLLEGE Department of Computer Science

Database I - 420-320-VA Assignment 1- Data Retrieval

Due: Monday, Feb. 11- by the end of class Teacher: NagatDrawel

Overview:

The purpose of this assignment is to explore the use of SELECT statement, one of the most frequently used SQL commands, to fetch records from Oracle database and how to use various clauses for filtering, grouping and sorting data.

Instructions:

- 1. You must work on this assignment individually.
- 2. You must use SQL command line to write and execute your queries.
- 3. Submit your assignment in a compressed folder yourname_assignment# that should include the assignment report **Assig1_Report.docx** and the spool file **Assig1_spool.sql**. The assignment must be submitted on Omnivox (Lea).
 - a. Include screenshots for the output of each command to **Assig1_Report.docx**. For screenshots, you can capture the screen (press PrintScreen Key), then paste the corresponding output or use snipping tool in Start menu.

What to do:

A simple database composed of the following tables: CUSTOMER, INVOICE, LINE, PRODUCT, and VENDOR, is now loaded with this assignment and you are ready to start. Please explore the database and then write the appropriate SQL command to answer the following questions.

- 1. Find all vendors rows for contacts whose last names begin with Smith (Assume case sensitivity).
- 2. List all products whose prices are between \$50 and \$100.
- 3. List all products with their expiration date (one year from the purchase date)
- 4. List all the rows in which the inventory stock dates occur on or after January 20, 2018.
- 5. How many vendors provide products?
- 6. List products where V_CODE is either 21344 or 24288. (Use IN operator).
- 7. List all products that do not have a vendor assigned.
- 8. How many products with price < 10?
- 9. How many invoices generated for each customer?
- 10. List the total purchase for each invoice sorted by invoice number. The invoice total is the: Sum (LINE_UNITS * LINE_PRICE).
- 11. List a summary of total product cost and total quantity-on-hand grouped by vendor
- 12. How many products each vendor provides?
- 13. List the number of products by vendor with the average price; include only the rows with price below 10.00.
- 14. List the product prices rounded to one decimal place.
- 15. Use the following statements to generate the appropriate SQL command:
 - 1 Aggregate the total cost of products for each vendor
 - 2 Select only the rows having a total cost greater than 500
 - 3 List the results in descending order by total cost