# COMP400725

## Lab Book 5

- ➔ Create a folder called ***Lab5*** in your ***COMP40725*** folder. You may wish to have this inside a folder that is being synced by Google Drive.
- ➔ Use Notepad++ or TextWrangler to write SQL queries. Test these queries in your ***Oracle 11g XE Database*** system. You can either use ***SQL Command Line*** or ***Oracle Web Interface*** to test your queries. Do not use ***MySQL*** as the commands will not work.
- ➔ Use comments in your sql queries: -- is for a single line, and /*... */ for multiline.
- ➔ Submit this document with the following name **"Lab5_LastName_FirstName_StudentNumber".**

NB. Web links in PDF version of document may be corrupt.

Please complete this practical using the web interface for Oracle. See "How to Launch Oracle and Execute SQL Commands" document on Moodle.

**This lab requires you to create and test the following queries.**

1. Run the example SQL DDL/DML code provided in ***Customer.sql*** available on Moodle. Please note you must cut and paste this into the SQL Command editor in the online Interface of Oracle. It will create 3 tables and populate them with data. Read the code so you understand the tables, columns, and their relationships. Enter the create table commands one at a time and then use the following to save time

   BEGIN
   <All your insert statements>
   END

   **[There is no requirement to paste information here]**

2. Create a query that lists each order number (CUST_ORDER table) with the first name and surname of the employee associated with the order.

   **[Paste you SQL Command here including comments]**
   **[Paste a screen shot of the output here]**

3. Create a self-join on the employee table, where the results should show each employee's name and their manager's name. Rename the columns in the results to be more appropriate.

   **[Paste you SQL Command here including comments]**
   **[Paste a screen shot of the output here]**

4. Use an outer join to list all employees' first name and surname with the customer order's (ORDER_NBR) they are associated with (i.e. sales_emp_id in the CUST_ORDER table). As it is an outer join, it should also list employees that have never had a sale.

   **[Paste you SQL Command here including comments]**
   **[Paste a screen shot of the output here]**

5. Create a query to display the total sales price of all orders (i.e. 1 value).

**[Paste you SQL Command here including comments]**
**[Paste a screen shot of the output here]**

6. Create a query to display the average sale_price of an order by each employee.

**[Paste you SQL Command here including comments]**
**[Paste a screen shot of the output here]**

7. Create a query to display the total sales price of all orders from each customer.

**[Paste you SQL Command here including comments]**
**[Paste a screen shot of the output here]**

8. Create a query to display the total sales price of all orders from each customer - where only customers who spent more than 1000 are considered.

**[Paste you SQL Command here including comments]**
**[Paste a screen shot of the output here]**

9. Demonstrate the use of a CUBE query on two columns (from any 2 tables in the sample database -can be same as lecture example if you add a category column in the part table).

**[Paste you SQL Command here including comments]**
**[Paste a screen shot of the output here]**

10. Demonstrate the use of the ROLLUP query on two columns different to those in the CUBE query above.

**[Paste you SQL Command here including comments]**
**[Paste a screen shot of the output here]**