COMP 3311: Database Management Systems

Lab 3 Exercise: Basic SQL Statements

HOW TO GET THE CREDIT FOR THIS LAB

1. **Download** the zipped folder Lab3Exercise.zip from the ***Basic SQL Statements*** entry of the Lab Schedule course webpage to the desktop and unzip it. The folder contains two SQL script files Lab3DB.sql and Lab3Queries.sql. The Lab3DB.sql script file drops (deletes) the Student table previously created, if any, and creates two tables Student and Department.
2. **Place** your InsertMyself.sql script file constructed in the previous lab inside the Lab3Exercise folder.
3. **Execute** the Lab3DB.sql script file in SQL Developer. The last line with the @ symbol in the Lab3DB.sql script file causes the referenced InsertMyself.sql script file to be executed.
   IMPORTANT: A referenced script file must reside in the same folder as the script file that references it.
4. **Modify** the Lab3Queries.sql script file by constructing the following five SQL queries in the specified locations in the script file.
   - **Query 1**. Find the student id, first name, last name, email and cga of the students who are in the ELEC department. Order the result by cga from highest to lowest cga.
   - **Query 2.** Find the first name of the students whose first name contains the letter 'l' as the 3rd character.
   - **Query 3.** Find the last name of the students whose last name contains either the letter 'c' or the letter 'z'.
   - **Query 4.** Find the first name and last name of all students whose first name or last name contains a double letter (e.g., "ee", ll", "mm", etc.).
   - **Query 5.** Find the student id, first name, last name, cga and department name of the students who are in the COMP or the ELEC department and whose CGA is not in the range 2.5 to 3.5. Order the result by last name ascending.

   Note: Your query results should show the same column headers as those shown in Figure 1.
5. **Execute** the Lab3Queries.sql script file in SQL Developer after you have constructed the queries.
   Note: You can test each of your queries individually, before executing the completed script file, by placing the cursor anywhere within the query and clicking the Run Statement button.

Note: The following SQL*Plus commands are used in theLab3DB.sql and Lab3Queries.sql script files.

clear screen	clears the Script Output pane.
set feedback off	suppresses the display of the number of records processed by a SELECT, DELETE, UPDATE or INSERT statement.
set heading off	hides the query result column headers of subsequent SQL statements.
set heading on	shows the query result column headers of subsequent SQL statements.

WHAT TO SUBMIT

1. Your modified Lab3Queries.sql script file.
2. A screenshot of the SQL Developer window with File name: Lab3 and Type: JPEG showing the result of executing the five queries in the Script Output pane as shown in Figure 1.

HOW TO SUBMIT

By 11:00 p.m. today, upload your modified Lab3Queries.sql script file and SQL Developer screenshot file to Canvas by selecting *Lab 3* in the Assignments section of Canvas, and then selecting the Submit Assignment button. To check your submission, select the Submission Details button on the right side of Canvas. For help, select the Help button at the top-right of Canvas.

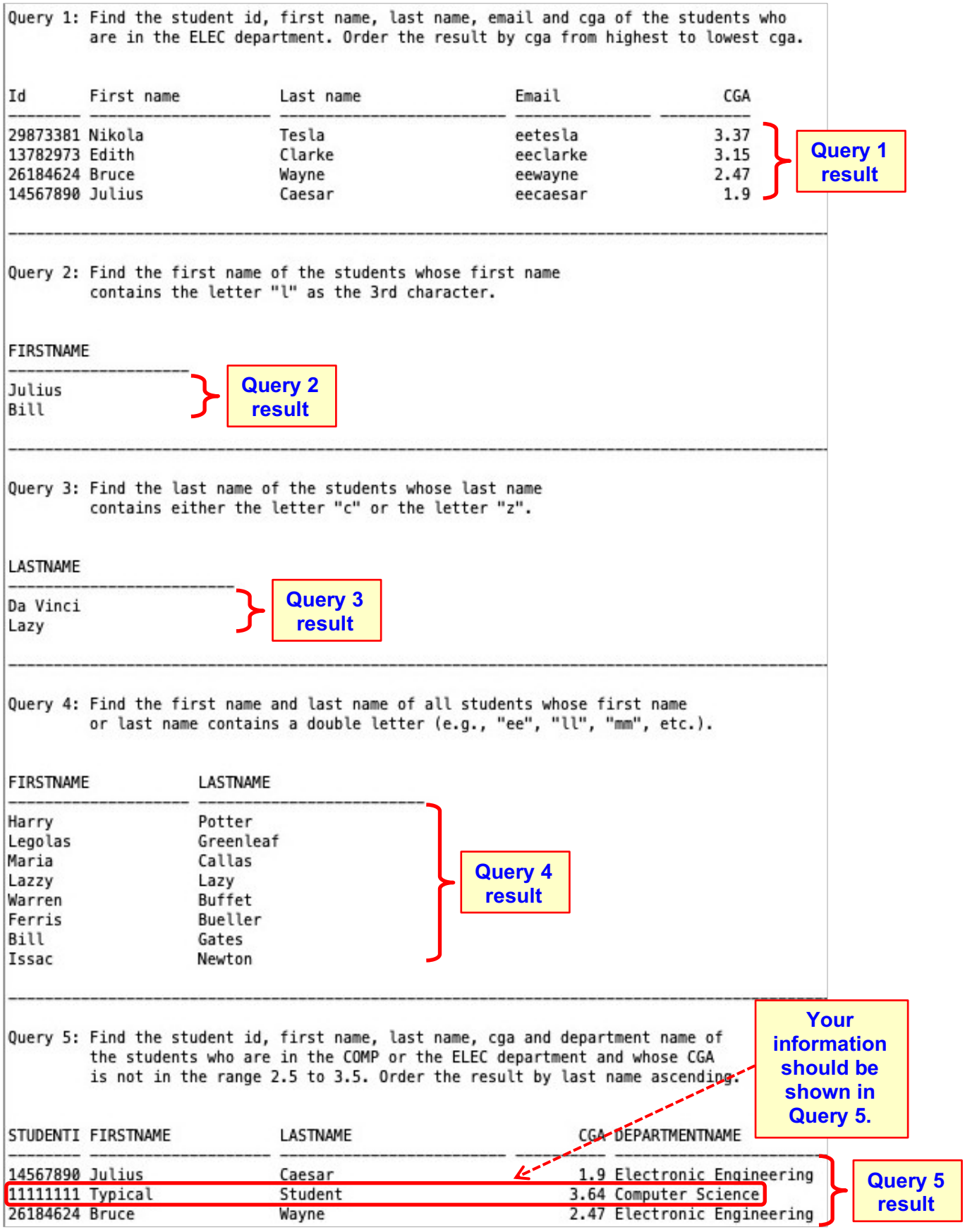

Figure 1: Example SQL Developer Script Output pane showing the result of executing the five queries.