

COMP 3311: Database Management Systems

Lab 2 Exercise: Basic SQL Statements

HOW TO GET THE CREDIT FOR THIS LAB

1. **Download** the Lab2.sql script file from the **Basic SQL Statements** entry of the Lab Schedule course webpage and **execute** it in SQL Developer. The script file adds an additional table, Department, and modifies the Student table by adding the attribute departmentId.
2. **Modify** your InsertMyself.sql script file constructed in the previous lab so that it inserts into the Student table an additional record with the following values.
 - Your student id, first name, last name and HKUST email address.
 - Any phone number of your choosing (it does not have to be your phone number).
 - The value “3.57” for the cga attribute of the Student relation.
 - The value “COMP” for the departmentId attribute of the Student relation. ← **NEW!**
3. **Execute** your modified InsertMyself.sql script file.
4. **Construct** a script file named Lab2ExerciseQueries.sql containing the following five SQL queries and **execute** it in SQL Developer.

Query 1. Find the student id, first name, last name, email and cga of the students who are in the COMP department. Order the result by cga from highest to lowest cga.
Your query result should have the same headings as shown in Figure 1.

Query 2. Find the first name of the students whose first name contains the letter ‘r’ 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 2.4 to 2.8. Order the result by last name ascending.

WHAT TO SUBMIT

1. Your Lab2ExerciseQueries.sql script file.
2. A screenshot of the SQL Developer window with File name: Lab2 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 11:59 p.m. today, upload your Lab2ExerciseQueries.sql script file and SQL Developer screenshot file to Canvas by selecting “Lab 2” 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. For help, select the “Help” button at the top-right of Canvas.

Lab 2 Exercise: Basic SQL Statements

Script Output x | Task completed in 0.248 seconds

Id	First name	Last name	Email	CGA
99987654	Lazy	Lazy	lz_lazy	
11111111	Typical	Student	typical	3.57
13456789	Ariana	Grande	cs_grande	2.83
13455789	Harry	Potter	cs_potter	2.76
15678989	Maria	Callas	cs_callas	2.73
15456789	Leonardo	Da Vinci	cs_davinci	2.72
15678901	Albert	Einstein	cs_einstein	2.56

7 rows selected.

FIRSTNAME

Harry
Maria
Warren
Ferris

LASTNAME

Da Vinci
Lazy

FIRSTNAME LASTNAME

Harry	Potter
Legolas	Greenleaf
Maria	Callas
Lazy	Lazy
Warren	Buffet
Ferris	Bueller

6 rows selected.

STUDENTI	FIRSTNAME	LASTNAME	CGA	DEPARTMENTNAME
14567890	Julius	Caesar	1.9	Electronic Engineering
13456789	Ariana	Grande	2.83	Computer Science
11111111	Typical	Student	3.57	Computer Science

Query 1 result

Query 2 result

Query 3 result

Query 4 result

Query 5 result

Your information should be shown in both Queries 1 and 5.

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