

## Preamble

Students are expected to attempt all the tasks included in this lab sheet during the allocated laboratory hours. Any question related to the tasks can be directed either to the Lab tutors in its first instance or to the lecturer. The tasks are arranged from **simple** to **medium** and **complex tasks** (colour coded). If you stumble on any of the questions, please proceed to the other questions, while seeking assistance. Do not waste a significant time trying to figure out the solution of one task on the expense of the other tasks.

### Lab Sheet-2 [October 4, 2021] [Solution document: available]

(You may use the “`show tables;`” statement to list all relations, “`describe [table]`” to see all the attributes and domains of a table)

#### Task 1

Using Sakila database

1. List down all the relations in the database.
2. List all the attributes of actor relation.
3. Determine the degree of the customer relation.

#### Task 2

Using dreamhome database

1. List all the relations in the database.
2. List all the attributes of PropertyForRent relation.
3. Determine the cardinality of the branch relation.
4. Identify the foreign keys of the viewing relation.
5. Identify the foreign keys of the registration relation.

#### Task 3

Using classicworld/world database

1. List all the attributes of the city relation.
2. List the domain of all the attributes in the city relation.
3. Show all the cities.

#### Task 4

Using sakila database

1. Select all information from the actor table. (4 columns, 200 rows)
2. Select all actors whose first name is ‘michael’. (4 columns, 2 rows)
3. List all actors whose first name begins with ‘A’. (4 columns, 13 rows)
4. List out the id and full name of actors whose first name begins with ‘A’, order by id from highest to lowest. (3 columns, 13 rows)
5. Return the number of films with the category\_id 3. (60)

**The information provided in the bracket after each question will let you quickly check whether your output is correct or not. For example, you will expect the output for Q1 has 4 columns and 200 rows; the output for Q5 is number 60.**

**NOTE: This information will **NOT** be provided in the exam.**