**Module:** CA218 - Introduction to Databases
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# 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-3 [October 11, 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 Selection

Using sakila database

1. Select all actors
   select * from actor;
2. Select all actors with first name "John".
   select * from actor where first_name="John";
3. Select all films with length less than 50 minutes;
   select * from film where length <50;
4. Select all films with length 60 minutes that are released in 2006 .
   select * from film where length = 60 and release_year =2006;

Using world database

1. Show all the cities (large set of data)
   select * from City;
2. Show all the cities with population more than 1 million.
   select * from City where population > 1000000;
3. Show all the cities in Ireland (countrycode ="IRL"
   select * from City where countrycode ="IRL";
4. Show all the cities in Ireland with population less than 200,000.
   select * from City where countrycode ="IRL" and population<200000;
5. Show all the countries in Africa or in antartctica region.
   select * from Country where continent ="africa" or continent ="antartctica";

### Task 2 Projection and Selection

Using sakila database

1. Select first name and last name of all actors
   select first_name, last_name from actor;
2. Select the last name of actors with first name "John".
   select last_name from actor where first_name="John";
3. Select the title of the films with length less than 50 minutes;
   select title from film where length <50;
4. Select all films with length 60 minutes that are released in 2006 .
   select * from film where length = 60 and release_year =2006;

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Using Dreamhome database

1. List the first name, last name and email addresses of private owners.
   select fname, lname from privateOwner;
2. Show the address of all the properties with three or more bedrooms.
   select street, city, postcode from propertyForRent where rooms >3;
3. Show the staff number of all the staff with salary greater than 30,000 and who are supervisors.
   select staffNo from staff where salary> 30000 and position ="Supervisor";
4. Show the clientNo, fname,lname and telNo of clients with maximum rent of 500.
   select clientNo, fname, lname, telNo from client where maxrent >500;