### Lab 4

## **Objectives**

In this lab you will practice the SELECT statement on a new database.

#### **Movies Exercise**

- Download and open the Movies script (as an SQL file).
- The Movies database has 3 tables: film, reviewer, and rating.
- The tables are populated and you will use this data in your exercise. The schema is stored in **movies\_script.sql**.
- Open and Execute the SQL script in MySQL Workbench.
- Open a new tab and save it as Review Exercise. Enter (and execute) the following commands:

USE MOVIES; /\*Select the Movies database\*/
SHOW TABLES; /\*List all the tables\*/

#### To do:

- 1. Describe each table.
- 2. Find the titles of all films directed by Steven Spielberg.

title
E.T.
Raiders of the Lost Ark

3. Return the title and year of all films produced from 1940 to 1990. Sort by title.

title	releaseYear
E.T.	1982
Raiders of the Lost Ark	1981
Star Wars	1977
The Sound of Music	1965

4. Return the title and length of all films whose length is 110 minutes or more. Sort by title.

title	length
E.T.	110
Gone with the Wind	120
Star Wars	150
The Sound of Music	125
Titanic	120

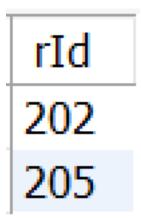
5. Return the title and director of all films where the director's surname begins with C.

title	director
Titanic	James Cameron
Snow White	William Cottrell
Avatar	James Cameron

6. Return the number of stars, film Id (output as Film Id), and ratingdate of all movie ratings where the rating given is 4 or 5. Sort the output in descending order of the stars and then in ascending order of movie id.

Film Id	stars	ratingdate
106	5	2018-01-19
107	5	2018-01-20
102	4	2018-01-27
104	4	2018-01-12
106	4	HULL
108	4	HULL

7. Some reviewers didn't provide a date with their rating. Find the rID of all reviewers who have ratings with a NULL value for the date.



8. Return the number of films. Label the returned column Number of Films.

Number of
Movies
8

9. Return the number of reviewers. Label the returned column Number of Reviewers.

# Number of Reviewers

8

10. Return the number of ratings. Label the returned column Number of Ratings Provided.

# Number of Ratings Provided

14

11. Return the number of films per director. Label the returned column for the calculation - Number of Films.

director	Number of Films
Victor Fleming	1
George Lucas	1
Robert Wise	1
Steven Spielberg	2
James Cameron	2
William Cottrell	1

12. Return the number of ratings left by each reviewer. Label the returned column for the calculation - Number of Reviews (per Reviewer).

rID	Number of Reviews (Reviewer)
201	2
202	1
203	3
204	1
205	3
206	2
207	1
208	1

13. Return the average number of film minutes per director. Label the returned column for the calculation - Average Number of Minutes per Film. The returned value is to be output as a whole number (no decimal places).

director	Average Number of Minutes per Film
Victor Fleming	120
George Lucas	150
Robert Wise	125
Steven Spielberg	100
James Cameron	113
William Cottrell	90