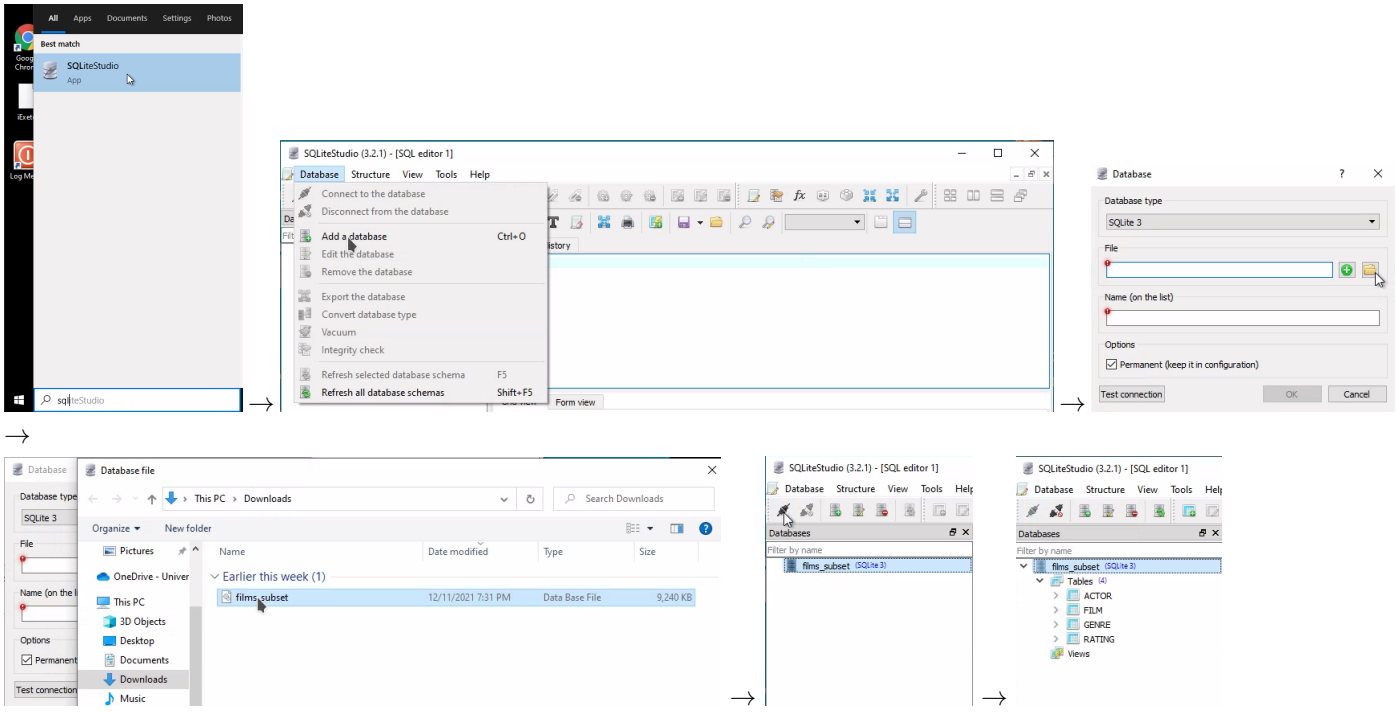
Database Technologies for Business Analytics
BEM2040
Practice – Week 2

The following instructions can be followed by using university computers, a virtual desktop or your personal computer, if the software has been installed.

1. Download the file Week2.zip. We will be using:
   - films_subset.db
2. Decompress the files in your downloads folder.
3. Start SQLiteStudio and add the database:



4. On the left-hand side (highlighted in blue in the picture below) you will see the tables (groups of data) that exist in the database: *ACTOR*, *FILM*, *GENRE* and *RATING*.

   Each table has several columns, as follows:

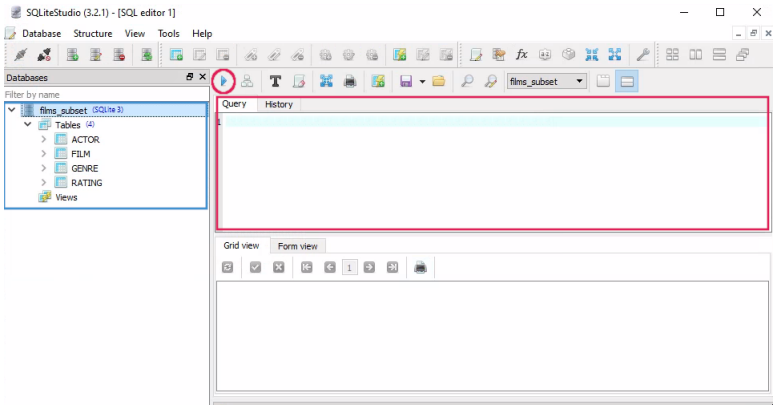
```
ACTOR:
 actor_id,
 actor_name,
 actor_year_born,
 actor_year_dead

FILM:
 film_id,
 film_title,
 film_year_start,
 film_year_end,
 genre_id

GENRE:
 genre_id,
 genre_name

RATING:
 rating_film_id,
 rating_average,
 rating_num_votes
```

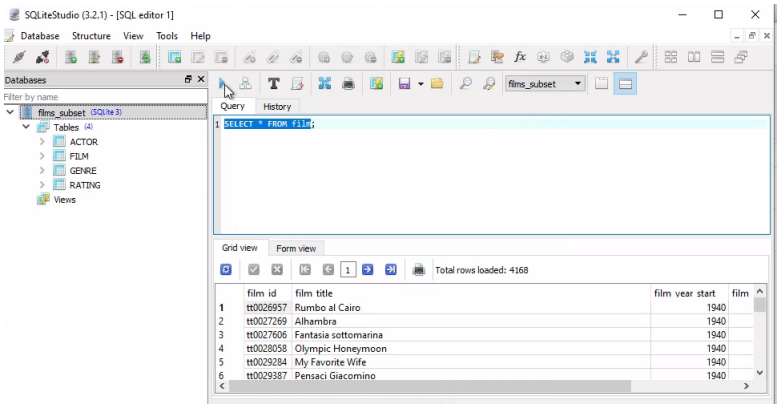
   We will be using queries to operate on some of them.



5. The following query helps us to retrieve all data in the table called *film*:

```
select * from film;
```

   We input it in the *query* tab (highlighted in red in the previous picture). After executing the query with the play button (also highlighted in red), we see the result in the section right below the query.



6. Let's now obtain films for a specific year (1940). The instruction is:

```
select * from film where film_year_start=1940;
```

7. Now, let's look at table *actor*. The instruction

```
select * from actor;
```

   gives an empty output, as there are no rows.

8. Let's add some rows:

```
insert into actor(actor_id, actor_name, actor_year_born, actor_year_dead)
values ("a1", "Timothée Chalamet", 1994, null);

insert into actor(actor_id,actor_name,actor_year_born,actor_year_dead)
values ("a2", "Rebecca Ferguson", 1983, null);
```

9. Check the table *actor* after the inserts, using once more the instruction:

```
select * from actor;
```

10. We can change data in one row, or several. For now, let's change the year Timothée Chalamet was born from 1994 to 1995, based on the id for that row:

```
update actor set actor_year_born = 1995 where actor_id = "a1";
```

11. And again let's check the content:

```
select * from actor;
```

    The year in which actor Timothée Chalamet was born is now updated.

12. Rows in a table can be counted in the following way:

```
select count(*) from actor;
```