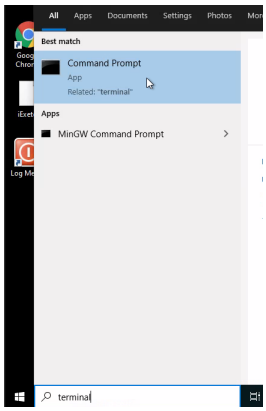
Database Technologies for Business Analytics
BEM2040
Practice – Week 3

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

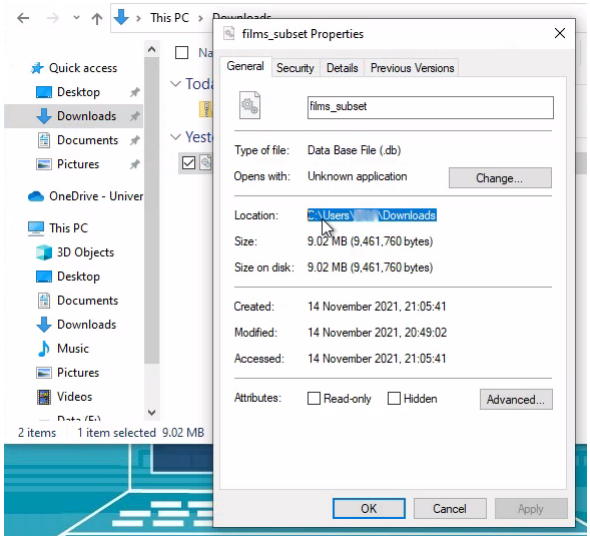
1. Download the file Week3.zip. We will be using:
   - films_subset.db
2. Decompress the files in your downloads folder.
3. We will be working with the command line tool for SQLite. To open it, type "terminal" in the windows starting search box:



The terminal would look like this, from a university comoputer (instead of ab000 you should see you user name):

```
Microsoft Windows [Version 10.0.19042.1288]
(c) Microsoft Corporation. All rights reserved.
d:\ab000.ISAD>
```

4. Copy the location of the database file by rigth-clicking the file in the explorer and selecting *Properties*:



5. Open the database with the sqlite3 command. Type *sqlite3* a blank space and then right click. The folder you copyed should appear. Then complete it so that the entire line looks similar to this:

```
d:\ab000.ISAD>sqlite3 C:\Users\ab000\Downloads\films_subset.db
```

Press enter and you should be working on the database:

```
SQLite version 3.27.2 2019-02-25 16:06:06
Enter ".help" for usage hints.
sqlite>
```

6. Let's see the content of table *film*. Write the instruction

```
SELECT * FROM film;
```

in the prompt:

```
sqlite> SELECT * FROM film;
```

The instruction has to end in semicolon (;). The result would be as follows (only the last records shown here):

```
tt1362551|Look to Lockheed for Leadership|1940||Documentary
tt13640566|Goodbye Yesterday|1941||Drama
tt13642790|Radio City Matinee|1941|1946|Family
tt13649610|Television Premiere|1941||Family
tt13649618|Final show on the Dumont Network|1941||Family
```

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

```
SELECT * FROM film where film_year_start=1940;
```

In the command line:

```
sqlite> SELECT * FROM film where film_year_start=1940;
```

```
tt13376548|The Green Archer Exposed|1940||Action
tt13386366|La caza del puma|1940||Animation
tt1341199|Kedok ketawa|1940||Drama
tt13545878|Goebbels-Geburtstagsfilm - 29.10.1940|1940||Short
tt1362551|Look to Lockheed for Leadership|1940||Documentary
```

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

```
SELECT * FROM actor;
```

gives an empty output, as there are no records.

```
sqlite> SELECT * FROM actor;
```

9. Let's add some records:

```
sqlite> INSERT into actor(actor_id,actor_name,actor_year_born,actor_year_dead)
  VALUES ("a1", "Timothée Chalamet", 1994, null);
sqlite> INSERT into actor(actor_id,actor_name,actor_year_born,actor_year_dead)
  VALUES ("a2", "Rebecca Ferguson", 1983, null);
```

```
sqlite>  SELECT * FROM actor;
a1|Timothée Chalamet|1994|
a2|Rebecca Ferguson|1983|
```

```
sqlite> UPDATE actor SET actor_year_born = 1995 WHERE actor_id = "a1";
sqlite> SELECT * FROM actor;
a1|Timothée Chalamet|1995|
a2|Rebecca Ferguson|1983|
sqlite>
```

The tables in the database are as follows:

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

FILM:
 film_id,
 film_title,
 film_year_start,
 film_year_end,
 film_major_genre

GENRE:
 genre_id,
 genre_name

RATING:
 rating_film_id,
 rating_average,
 rating_num_votes
```
