

## SQL Exercise

I have made a small “realistic” sample database for the SQL exercises. The database is a subset of “The Internet Movie Database” (IMDB – [imdb.com](http://imdb.com)). It have tree tables (the real one approx. 14 ):

movie(id, title, production\_year, kind) [ca. 50000 rows]

casting(person\_id, movie\_id, nr\_order, role) [ca. 750000 rows]

person(id, name) [ca. 300000 rows]

These tables are reduced with respect to both rows and fields and the sample is a random subset of movies from 2005-2011.

The SQLite database can be downloaded from Moodle.

**Write SQL queries to answer the following:**

- 1) Find the titles of all movies with a title starting with 007.

The answer should be:

	movie_id	title	production_year	kind
1	954	007 in Egypt	2006	video movie
2	960	007: Licence to Restore	2006	video movie

- 2) How many movies were produced in 2004?

The answer should be:

	count(*)
1	12086

- 3) What is the average number of persons per movie?

The answer should be:

	AVG_PERSONS
1	14.6784376152666

**4) Find the title of all movies with Mads Mikkelsen.**

The answer should be:

	title
1	Casino Royale
2	King Arthur

**5) Find the different roles that Kevin Bacon has had.**

The answer should be:

	role
1	actor
2	director
3	producer

**6) Find for each role the number of persons assigned to the roles.**

The answer should be:

	role	count(*)
1	actor	339206
2	actress	227849
3	director	46601
4	producer	142445

**7) Find, for the titles in question 1, all actors, and show the answer sorted by title.**

The answer should be:

	title	name	role
1	007 in Egypt	Broccoli, Albert R.	actor
2	007 in Egypt	Cooper, Jack	actor
3	007 in Egypt	Gilbert, Lewis	actor
4	007 in Egypt	Grace, Martin	actor
5	007 in Egypt	Kiel, Richard	actor
6	007 in Egypt	Moore, Roger	actor
7	007 in Egypt	Reid, Milton	actor
8	007 in Egypt	Renoir, Claude	actor
9	007 in Egypt	Simmons, Bob	actor
10	007: Licence to Restore	Cooper, Patrick	actor
11	007: Licence to Restore	Gomez, Ryan	actor
12	007: Licence to Restore	Grossman, Scott	actor
13	007: Licence to Restore	Inchalik, Michael	actor
14	007: Licence to Restore	Lowry, John	actor
15	007: Licence to Restore	Owsley, James	actor
16	007: Licence to Restore	Pethel, Price	actor

8) Show for each movie type (Hint: the attribute is named "kind") the number of titles.

The answer should be:

	kind	count(*)
1		2
2	episode	3295
3	movie	21198
4	tv mini series	277
5	tv movie	4938
6	tv series	3352
7	video game	682
8	video movie	18323

9) Find the title of movies directed by Ridley Scott.

The answer should be:

	title
1	American Gangster
2	Blood Meridian
3	Body of Lies
4	Good Year, A
5	Kingdom of Heaven
6	Nottingham

10) What is the highest number of persons casted for one movie?

The answer should be:

	max(pcount)
1	348

11) How many actors has Kevin Bacon acted together with?

The answer should be:

	num_persons
1	777