Shalom Azar

MySQL exercise 5 – Advanced SQL queries

General instructions:  
In this section, you will work on the IMDB database.

You will phrase a single query to answer each of the following questions. Make sure you write the simplest query possible. You are not allowed to create views.

Do the following for each question:  
a. Write down the query you run.  
b. Describe in a comment what results you got.

1. Who are the actors that have participated only in the films “Star Wars” and “Return of the Jedi”?   
   a. select full\_name from actors where id not in (select actor\_id from cast where movie\_id not in (select id from movies where title = 'Star Wars' or 'Return of the Jedi')) and id not in (select actor\_id from cast where movie\_id in (select id from movies where title = 'Star Wars' and 'Return of the Jedi'));  
   b. I got a list of 101 actors that have participated only in the films “Star Wars” or “Return of the Jedi”?
2. Find the top five actors with the most diverse career (i.e. participation in movies of different genres).   
   a. select actors.full\_name from actors join (select cast.actor\_id cai, count(distinct movies.genre) from movies join cast on movies.id = cast.movie\_id group by cast.actor\_id order by count(distinct movies.genre) desc limit 5) cm on actors.id = cm.cai;   
   b. I got a list of the top 5 actors who play in the most genres, one of them plays in 6 different genres the rest play in 3.
3. Which actor holds the record for participating in the most films in a single year?   
   a. select full\_name from actors where id = (select cast.actor\_id from movies join cast on movies.id = cast.movie\_id group by cast.actor\_id, movies.year order by count(distinct movies.id) desc limit 1);  
   b. Cameron Diaz
4. What is the average career span (i.e. years between the first film and the last film) of actors who participated in five films during their entire career?   
   a. select AVG(a. difyears) from (select max(year)-min(year) difyears from movies join cast on movies.id = cast.movie\_id group by cast.actor\_id having count(movie\_id) >= 5) a;   
   b. 25.000
5. Which actor had the longest hiatus between two of his films?   
   a. select max(a.difyears) from (select max(year)-min(year) difyears from movies join cast on movies.id = cast.movie\_id group by cast.actor\_id) a;  
   b. 25