Final Queries:

Note: role_type and role_description meanings got flipped in our database, role_type is the description, not the generic code

Director ids are also not used, which is not ideal...

1. What movies (list title and year) have "george" (in any form) at the end of their titles. Order by the title.

Row count: 4

select title, year_released from movie where title like '%george' or title like '%George' order by title:

2. Has any actor ever appeared in both a movie and an immediate remake of an immediate remake? If so, list the actor's stagename, the movie titles, the years, and the roles. Order by stagename, year, and movie title.

row count: 11

SELECT og_actor.stage_name, ancestor.title, descendant.title as remake_title, ancestor.year_released, descendant.year_released as remake_year_released, og_cast.role_type as original role, acts in.role type

from remakes as r

join movie as ancestor on r.original_film_id=ancestor.film_id
join remakes as s on r.film_id=s.original_film_id
join movie as descendant on descendant.film_id=s.film_id

join acts in as og cast on ancestor.film id=og cast.film id

join actor as og actor on og cast.person id=og actor.person id

join acts_in on descendant.film_id=acts_in.film_id and acts_in.person_id=og_cast.person_id

order by og_actor.stage_name, ancestor.year_released, ancestor.title

3. Which movie immediate remake is most similar to the original (i.e., has the highest percentage)? Show the title, year, director for the original movie and the remake along with the percentage of similarity between them; in the case of a tie, display them all.

Row count: 11

```
select original.title, original.year_released, director.first_name, director.last_name, remake.title as remake_title, remake.year_released as remake_year_released, p.first_name, p.last_name, remakes.similarity

from remakes

join movie as original on remakes.original_film_id=original.film_id

join movie as remake on remakes.film_id=remake.film_id

join worked_on on worked_on.film_id=original.film_id and worked_on.work_type='director'

join worked_on as w on w.film_id=remake.film_id and w.work_type='director'

join person as director on director.person_id=worked_on.person_id

join person as p on p.person_id=w.person_id

where remakes.similarity = (select max(similarity) from remakes)
```

4. Which movie has been remade (directly or indirectly) the most times over all (i.e., is the ancestor of the most remakes)?

Row count: 1
select max(totalRemakes)

from (with recursive remakes_movies as

(select m.film_id as movieId, rm.film_id from movie as m join remakes as rm on m.film_id = rm.original_film_id

union

select re.film_id, r.film_id from remakes as re inner join remakes as r on r.film_id = re.original_film_id)

select count(movieId) as totalRemakes from remakes movies group by movieId) as s;

5. Which movies are neither a remake nor have ever been remade? Order by title.

Row count: 10,353

select * from movie

where not exists (select remakes.film_id from remakes where movie.film_id=remakes.film_id or movie.film_id=remakes.original_film_id)

order by movie.title

6. List the stagename of actors that have won an Academy Award for their role in a movie; include their name and role, the name of the movie they won the award for, and the year they won; order the list by the year the movie was made.

Row count: 106

select a.stage_name, i.role_type, a.actor_type, m.title, m.year_released

from actor as a join awarded_people as p on a.person_id = p.person_id join movie as m on p.film_id = m.film_id join acts_in as i on a.person_id = i.person_id and m.film_id = i.film_id where award_name = 'AA'

order by m.year_released;

7. Which movies, by name, won Academy Awards in 1970?

Row count: 2

select m.title from movie as m join awarded_movies as a on m.film_id = a.film_id where a.award name = 'AA' and m.year released = '1970';

8. Has any original movie and an immediate remake both won an Academy Award? If so, list the name of the original and the remake along with the year for each ordered by name of the original and remake.

Row count: 1

select m.title, m.year_released, f.title, f.year_released

from movie as m join awarded_movies as a on m.film_id = a.film_id join remakes as r on m.film_id = r.original_film_id join awarded_movies as s on s.film_id = r.film_id join movie as f on f.film_id = r.film_id

where a.award name = 'AA' and s.award name = 'AA';

9. Find the name and year of the movie that has the shortest title.

Row count: 5

select title, year released from movie where length(title)=(select min(length(title)) from movie)

10. What movies did "George Fox" write?

row count: 0

We didn't parse the 'notes' file so George Fox isn't in our database

```
select title from person as p
join worked_on as w on p.person_id = w.person_id
join movie as m on m.film_id = w.film_id
where first name = 'George' and last name = 'Fox' and w.work type = 'writer';
```

11. Are there any actors that have played more than one role in the same movie?! If so, list the movie title, the actor's name and the roles they played. Order by movie title, actor's name, and role.

```
Row count: 120

select movie.title, actor.stage_name, string_agg(acts_in.role_type, ',') as role_descriptions from acts_in

join (select person_id, film_id from acts_in group by person_id, film_id having count(*) > 1) as many_acts

on acts_in.person_id=many_acts.person_id and acts_in.film_id=many_acts.film_id

join movie on many_acts.film_id=movie.film_id

join actor on many_acts.person_id=actor.person_id

group by movie.title, actor.stage_name
```

12. Are there any pairs of actors that appeared together in two different movies released in the same year? If so, list the movie titles, the years, the actor's names and the roles they played. Order by movie title, year, actor's names, and roles.

```
Row count: 298

select c.stage_name, d.stage_name, a.year_released, string_agg(movie.title, ', ') as titles from (select a.person_id as actor, b.person_id as coactor, a.film_id as fid, year_released from acts_in as a join movie on a.film_id=movie.film_id

join acts_in as b on movie.film_id=b.film_id

where not a.person_id=b.person_id) as a join

(select a.person_id as actor, b.person_id as coactor, a.film_id as fid, year_released
```

```
from acts in as a
 join movie on a.film id=movie.film id
 join acts in as b on movie.film id=b.film id
 where not a.person id=b.person id) as b
 on a.year released=b.year released and a.actor=b.actor and a.coactor=b.coactor
 join actor as c on a.actor=c.person id
 join actor as d on a.coactor=d.person id
 join movie on a.fid=movie.film id
 where not a.actor=b.coactor and not b.actor=a.coactor and not a.fid=b.fid
 group by c.stage name, d.stage name, a.year released
   13. List the title, year, and role for movies that "Tom Cruise" appeared in ordered by
       the year.
Row count: 22
select movie.title, movie.year released, acts in.role description
from actor
join acts in on actor.person id=acts in.person id
join movie on acts in.film id=movie.film id
where actor.stage name='Tom Cruise'
order by year released;
   14. Is there an actor that has been a co-star with "Val Kilmer" and "Clint Eastwood"
       (not necessarily in the same movie)?!
Row count: 1
select clint.stage name
 from (select d.stage name from actor as a
 join acts in as b on a.person id=b.person id
```

join acts in as c on b.film id=c.film id

```
join actor as d on c.person_id=d.person_id
where a.stage_name='Clint Eastwood') as clint
join (select h.stage_name from actor as e
   join acts_in as f on e.person_id=f.person_id
   join acts_in as g on f.film_id=g.film_id
   join actor as h on g.person_id=h.person_id
   where e.stage_name='Val Kilmer') as val
   on clint.stage_name=val.stage_name
```

15. Give me the names of all actors within "six degrees" of "Kevin Bacon". Specifically, Bacon's co-stars (1st degree), the co-star's co-stars (2nd degree), etc. out to "six degrees". List the actors ordered by stagename.

Row count: 3750

select distinct b.stage_name from actor

join acts_in as movies_in on actor.person_id=movies_in.person_id

join acts_in as costars on movies_in.film_id=costars.film_id

join acts_in as their_movies on costars.person_id=their_movies.person_id

join acts_in as costars2 on their_movies.film_id=costars2.film_id

join acts_in as co2movies on costars2.person_id=co2movies.person_id

join acts_in as costars3 on co2movies.film_id=costars3.film_id

join acts_in as co3movies on costars3.person_id=co3movies.person_id

join acts_in as co4movies on costars3.person_id=co4movies.person_id

join acts_in as co4movies on costars3.person_id=co4movies.person_id

join acts_in as co5movies on co4movies.film_id=costars5.film_id

join acts_in as co5movies on co5movies.film_id=co5movies.person_id

join acts_in as co5movies on co5movies.film_id=costars6.film_id

join acts_in as costars6 on co5movies.film_id=costars6.film_id

join acts_in as costars6.person_id=b.person_id

```
where actor.stage_name='Kevin Bacon'
and not movies_in.person_id=costars.person_id
and not their_movies.person_id=costars2.person_id
and not co2movies.person_id=costars3.person_id
and not co3movies.person_id=costars4.person_id
and not co4movies.person_id=costars5.person_id
and not co5movies.person_id=costars6.person_id
```

16. List the names of all actors that have ever appeared in a movie directed by "Clint Eastwood" along with a count of how frequently they've appeared in movies he directed ordered by the count (descending) and their name (ascending).

```
Row count: 47

select actor.stage_name, count(*) as num_appearances

from person as p

join worked_on as w on p.person_id=w.person_id

join acts_in as a on w.film_id=a.film_id

join actor on a.person_id=actor.person_id

where p.first_name='Clint' and p.last_name='Eastwood' and work_type='director'

group by actor.stage_name

order by count(*) desc, actor.stage_name asc
```

17. What are the categories (i.e., genre) of movies that "Ronald Reagan" has appeared in as an actor?

```
Row count: 7
select distinct genre from movie join acts_in on movie.film_id=acts_in.film_id
join actor on acts_in.person_id=actor.person_id
where stage_name = 'Ronald Reagan' and genre is not null;
```

18. Was there any year where more movies were made in Denmark than in the US? If so, give the years.

Row count: 1

select d.year released from

(select count(*) as num, year_released from movie as m join films as f on m.film_id = f.film_id join studio as s on s.studio_id = f.studio_id where s.country = 'USA' group by m.year_released) as u

full outer join

(select count(*) as num, year_released from movie as m join films as f on m.film_id = f.film_id join studio as s on s.studio_id = f.studio_id where s.country = 'Denmark' group by m.year_released) as d on d.year_released = u.year_released

where d.year released is not null;

19. "Paramount" is a famous studio. What category (i.e., genre) of movie was most commonly made by "Paramount"?

Row count: 1

The genre most commonly made by "Paramount" is comedy, or "Comd"

select genre, count(genre) as genre_count from studio join films on studio.studio_id=films.studio_id

join movie on films.film_id=movie.film_id

where studio.studio_name='Paramount'

group by genre

having count(genre)=(select max(genre_count)

from (select genre, count(genre) as genre_count

from studio join films on studio.studio_id=films.studio_id

join movie on films.film_id=movie.film_id

where studio.studio_name='Paramount'

group by genre) as sub a)

20. Has any person directed and produced a movie they've also acted in? If so, give their stagename, the title of the movie they directed and produced, and the role(s) they played.

Row count: 10

```
select actor.stage_name, movie.title, string_agg(acts_in.role_type, '; ')

from (select person_id, film_id from worked_on where work_type='producer') as producers

join (select person_id, film_id from worked_on where work_type='director') as directors on

producers.film_id=directors.film_id and producers.person_id=directors.person_id

join acts_in on directors.person_id=acts_in.person_id and directors.film_id=acts_in.film_id

join movie on acts_in.film_id=movie.film_id

join actor on acts_in.person_id=actor.person_id

group by actor.stage_name, movie.title
```

21. For all of the generic role types for actors, list the name of the roletype and a count of how many actors are classified by that type in descending order of the counts.

Row count: 90

select role_description, count(*) from acts_in where role_description is not null group by role_description order by count(*) desc;

22. For all of the generic categories for movies (e.g., "drama", "mystery"), list the name of the category (long form, if possible) and a count of how many movies are in that category for movies from 1961 in descending order of the counts.

Row count: 19

select genre, count(*) from movie where year_released = '1961' group by genre order by count desc;

23. Who was the oldest actor to appear in a movie? I.e., has the largest difference between their date of birth and the release of a movie they appeared in. Give their name, rough age at the time, title of the movie, and the role they played; in the case of a tie, display them all.

```
Row count: 1

select stage_name, (movie.year_released-person.dob) from person
join actor on person.person_id=actor.person_id

join acts_in on actor.person_id=acts_in.person_id

join movie on acts_in.film_id=movie.film_id

where (movie.year_released-person.dob) is not null
```

```
and (movie.year_released-person.dob)=

(select max(movie.year_released-person.dob) from person
join acts_in on person.person_id=acts_in.person_id
join movie on acts_in.film_id=movie.film_id)

order by (movie.year_released-person.dob) desc;
```