Buat DB

```
postgres=# Create Database movie;
```

Masuk databse movie

```
postgres-# \c movie
You are now connected to database "movie" as user "postgres".
```

Create Table

```
movie=# create table actor (
movie(# act_id int primary key,
movie(# act_fname varchar,
movie(# act_lname varchar,
movie(# act_gender varchar
movie(# );
CREATE TABLE
```

Melihat tabel

```
movie-# \d
              List of relations
 Schema |      Name       | Type  |  Owner
--------+-----------------+-------+----------
 public | actor           | table | postgres
 public | director        | table | postgres
 public | genres          | table | postgres
 public | movie           | table | postgres
 public | movie_cast      | table | postgres
 public | movie_direction | table | postgres
 public | movie_genres    | table | postgres
 public | rating          | table | postgres
 public | reviewer        | table | postgres
(9 rows)
```

Insert Tabel

```
movie=# INSERT INTO actor (act_id,act_fname,act_lname,act_gender) VALUES
movie-# ('101','James','Stewart','M'),
movie-# ('102','Deborah','Kerr','F'),
movie-# ('103','Peter','OToole','M'),
movie-# ('104','Robert','De Niro','M'),
movie-# ('105','F. Murray','Abraham','M'),
movie-# ('106','Harrison','Ford','M'),
movie-# ('107','Nicole','Kidman','F'),
movie-# ('108','Stephen','Baldwin','M'),
movie-# ('109','Jack','Nicholson','M'),
movie-# ('110','Mark','Wahlberg','M'),
movie-# ('111','Woody','Allen','M'),
movie-# ('112','Claire','Danes','F'),
movie-# ('113','Tim','Robbins','M'),
movie-# ('114','Kevin','Spacey','M'),
movie-# ('115','Kate','Winslet','F'),
movie-# ('116','Robin','Williams','M'),
movie-# ('117','Jon','Voight','M'),
movie-# ('118','Ewan','McGregor','M'),
movie-# ('119','Christian','Bale','M'),
movie-# ('120','Maggie','Gyllenhaal','F'),
movie-# ('121','Dev','Patel','M'),
movie-# ('122','Sigourney','Weaver','F'),
movie-# ('123','David','Aston','M'),
movie-# ('124','Ali','Astin','F');
INSERT 0 24
```

Basic SQL Command

```
movie=# Select * From actor;
 act_id | act_fname | act_lname  | act_gender
--------+-----------+------------+------------
    101 | James     | Stewart    | M
    102 | Deborah   | Kerr       | F
    103 | Peter     | OToole     | M
    104 | Robert    | De Niro    | M
    105 | F. Murray | Abraham    | M
    106 | Harrison  | Ford       | M
    107 | Nicole    | Kidman     | F
    108 | Stephen   | Baldwin    | M
    109 | Jack      | Nicholson  | M
    110 | Mark      | Wahlberg   | M
    111 | Woody     | Allen      | M
    112 | Claire    | Danes      | F
    113 | Tim       | Robbins    | M
    114 | Kevin     | Spacey     | M
    115 | Kate      | Winslet    | F
    116 | Robin     | Williams   | M
    117 | Jon       | Voight     | M
    118 | Ewan      | McGregor   | M
    119 | Christian | Bale       | M
    120 | Maggie    | Gyllenhaal | F
    121 | Dev       | Patel      | M
    122 | Sigourney | Weaver     | F
    123 | David     | Aston      | M
    124 | Ali       | Astin      | F
(24 rows)
```

Melihat banyaknya film berdasarkan bahasa

```
movie=# select mov_lang, count(mov_id) from movie group by mov_lang;
 mov_lang | count
----------+-------
 English  |    25
 Japanese |     3

(2 rows)
```

Pemakaian statemen kondisi
Memberikan lavel pada kondisi film berdasarkan rating

```
movie=# select mov_id, rev_stars,
movie-#     case
movie-#         when rev_stars between 0 and 5 then 'film jelek'
movie-#         when rev_stars between 5 and 7 then 'film lumayan'
movie-#         when rev_stars between 7 and 10 then 'film bagus'
movie-#      else 'belum ada rating'
```

```
movie-#      end as status_rating
movie-# from rating;
 mov_id | rev_stars |  status_rating
--------+-----------+------------------
    901 |      8.40 | film bagus
    902 |      7.90 | film bagus
    903 |      8.30 | film bagus
    906 |      8.20 | film bagus
    924 |      7.30 | film bagus
    908 |      8.60 | film bagus
    909 |           | belum ada rating
    910 |      3.00 | film jelek
    911 |      8.10 | film bagus
    912 |      8.40 | film bagus
    914 |      7.00 | film lumayan
    915 |      7.70 | film bagus
    916 |      4.00 | film jelek
    925 |      7.70 | film bagus
    918 |           | belum ada rating
    920 |      8.10 | film bagus
    921 |      8.00 | film bagus
    922 |      8.40 | film bagus
    923 |      6.70 | film lumayan
(19 rows)
```

Latihan

1. **Find a movie title that has a character named Alice Harford**

   ```
   movie=# select m.mov_id, m.mov_title, mc.role
   movie-# from movie m
   movie-# inner join movie_cast mc on m.mov_id = mc.mov_id
   movie-# where mc.role = 'Alice Harford';

    mov_id |   mov_title    |     role
   --------+----------------+---------------
       907 | Eyes Wide Shut | Alice Harford
   (1 row)
   ```

2. **Find each genre of each movies**

   ```
   movie=# select m.mov_id, m.mov_title, mgenres.gent
   movie-# from movie m
   movie-# left join (select mg.mov_id as movid, g.gen_title as gent from
   movie_genres mg, genres g where mg.gen_id=g.gen_id) mgenres  on m.mov_id =
   mgenres.movid;

    mov_id |        mov_title         |   gent
   --------+--------------------------+-----------
       922 | Aliens                   | Action
       917 | Deliverance              | Adventure
       903 | Lawrence of Arabia       | Adventure
       912 | Princess Mononoke        | Animation
       911 | Annie Hall               | Comedy
       908 | The Usual Suspects       | Crime
       913 | The Shawshank Redemption | Crime
       926 | Seven Samurai            | Drama
       928 | Back to the Future       | Drama
       918 | Trainspotting            | Drama
   ```

```
    921 | Slumdog Millionaire       | Drama
    902 | The Innocents             | Horror
    923 | Beyond the Sea            | Music
    907 | Eyes Wide Shut            | Mystery
    927 | Spirited Away             | Mystery
    901 | Vertigo                   | Mystery
    914 | American Beauty           | Romance
    906 | Blade Runner              | Thriller
    904 | The Deer Hunter           | War
    910 | Boogie Nights             |
    919 | The Prestige              |
    915 | Titanic                   |
    909 | Chinatown                 |
    905 | Amadeus                   |
    924 | Avatar                    |
    920 | Donnie Darko              |
    916 | Good Will Hunting         |
    925 | Braveheart                |
(28 rows)
```

3. **Find the most favorite genre (using average rating of each genre)**

4. **Find what year that has most movies (movies of each year)**

```
movie=# select count(mov_id) total, mov_year
movie-#     from movie
movie-#     group by mov_year
movie-#     order by total desc
movie-#     limit 1;
 total | mov_year
-------+----------
     4 |     1997
(1 row)
```

5. **Find actor that has played as Sean Maguire**

```
movie=# select m.mov_title, concat(a.act_fname, ' ',a.act_lname)
actor_name, c.role
movie-# from movie m join movie_cast c on m.mov_id = c.mov_id
movie-#     join actor a on a.act_id = c.act_id
movie-# where c.role='Sean Maguire';

     mov_title     |   actor_name   |     role
-------------------+----------------+--------------
 Good Will Hunting | Robin Williams | Sean Maguire
(1 row)
```

6. Find a movie with the lowest rating

```
movie=# select r.rev_stars, m.mov_title
movie-#     from movie m join rating r on m.mov_id = r.mov_id
movie-#     order by r.rev_stars asc
movie-#     limit 1;
 rev_stars |   mov_title
-----------+---------------
```

```
       3.00 | Boogie Nights
(1 row)
```

7. Find how many female actor who acted in 21st century

8. Find actor that has played in more than one movie

9. Find female actor whose movies received a highest rating

```
movie=# select a.act_id, concat(a.act_fname, ' ',a.act_lname)  actor_name, r.rev_stars
movie-#     from actor a
movie-#     inner join movie_cast mc on a.act_id = mc.act_id
movie-#     inner join rating r on r.mov_id = mc.mov_id
movie-# where a.act_gender = 'F'
movie-# order by r.rev_stars desc
movie-# limit 1;
 act_id |  actor_name  | rev_stars
--------+--------------+-----------
    112 | Claire Danes |      8.40
(1 row)
```

10. Find reviewer who never give the low rating (below 8)

11. Find the number of director who directed drama movies

12. Count the number of male and female actor

```
movie=# select act_gender, count(act_gender) from actor group by
act_gender;
 act_gender | count
------------+-------
 M          |    17
 F          |     7
(2 rows)
```

Atau

```
movie=# select
movie-#     case
movie-#         when act_gender = 'M' then 'Male'
movie-#         when act_gender = 'F' then 'Female'
movie-#         else 'no gender'
movie-#     end as gender_label,
movie-#     count(act_gender)
movie-# from actor
movie-# group by act_gender;
 gender_label | count
--------------+-------
 Male         |    17
 Female       |     7
(2 rows)
```