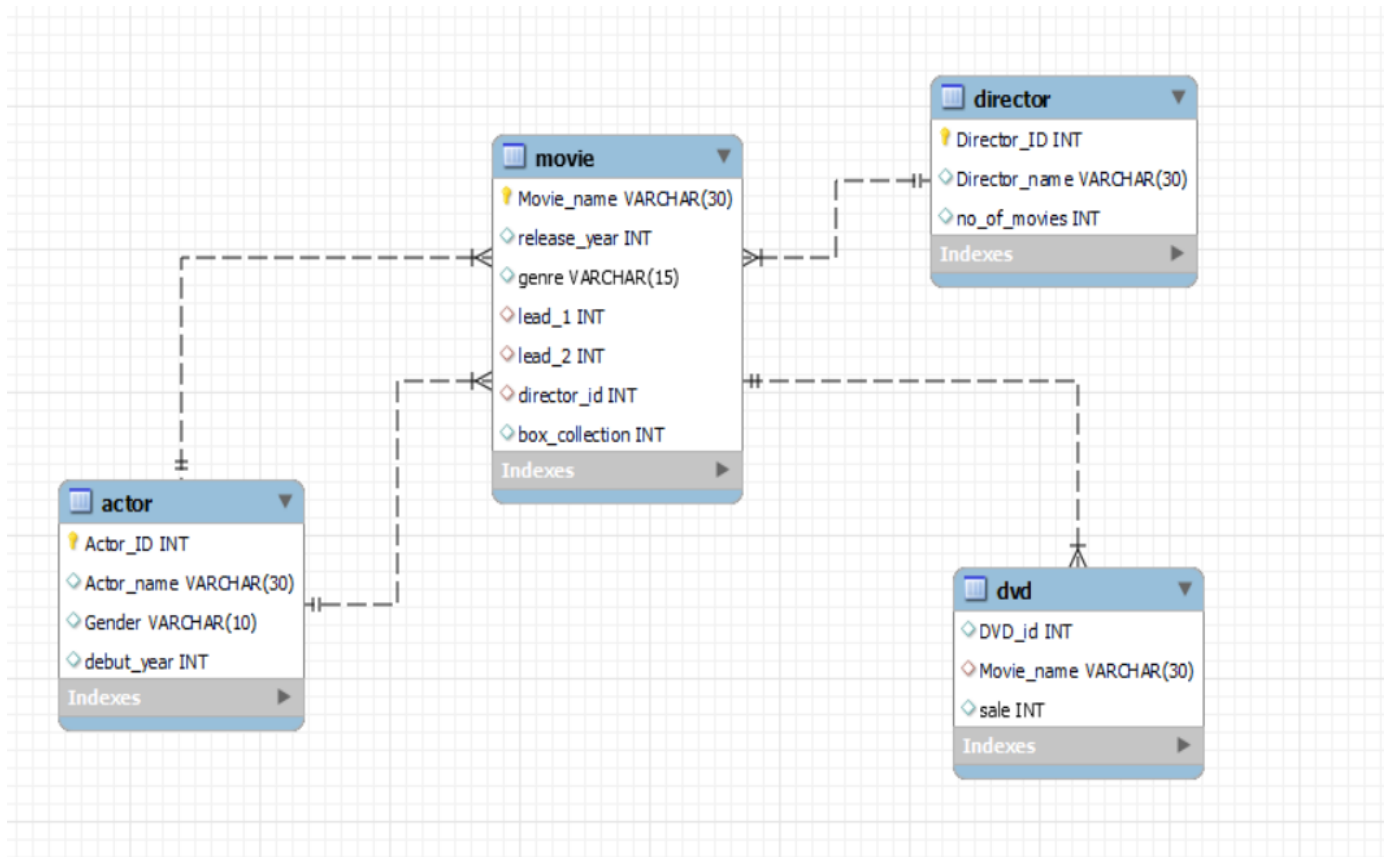# SQL Group By assignment

Database Schema

Initial queries for database, table creation and inserting values

Create and use database

```
create database grpby;

use grpby;
```

Create Tables

```
CREATE TABLE Actor(Actor_ID int,Actor_name varchar(30),Gender
varchar(10),debut_year int);

CREATE TABLE Director(Director_ID int,Director_name
varchar(30),no_of_movies int);

CREATE TABLE Movie(Movie_name varchar(30),release_year int,genre
varchar(15),lead_1 int,lead_2 int,director_id int,box_collection int );

CREATE TABLE DVD(DVD_id int,Movie_name varchar(30),sale int);
```

Inserting Values

```sql
insert into actor values(1,'Aamir Khan','male',1988);
insert into actor values(2,'Shahrukh Khan','male',1992);
insert into actor values(3,'Kareena Kapoor','female',2000);
insert into actor values(4,'Kajol','female',1992);
insert into actor values(5,'Anushka Sharma','female',2008);
insert into actor values(6,'Ranbir Kapoor','male',2007);
insert into actor values(7,'Alia Bhatt','female',2012);
insert into actor values(8,'Ranveer Singh','male',2010);
insert into actor values(9,'Deepika Padukone','female',2006);
insert into actor values(10,'Shahid Kapoor','male',2003);
insert into actor values(11,'Katrina Kaif','female',2003);
insert into actor values(12,'Varun Dhawan','male',2012);


insert into director values(1,'Rajkumar Hirani',10);
insert into director values(2,'Sanjay Leela Bhansali',8);
insert into director values(3,'Aditya Chopra',6);
insert into director values(4,'Zoya Akhtar',3);
insert into director values(5,'Imtiaz Ali',5);
insert into director values(6,'Ayan Mukerji',4);
insert into director values(7,'Santosh Sivan',9);
insert into director values(8,'Farah Khan',4);


insert into movie values('3 Idiots',2009,'comedy',1,3,1,989600000);
insert into movie values('PK',2014,'satire',1,5,1,789600000);
insert into movie values('Bajirao
Mastani',2015,'historic',8,9,2,68960000);

insert into movie values('Rab ne bana di
jodi',2008,'romance',2,5,3,48960000);

insert into movie values('Gully boy',2019,'Musical drama',8,7,4,28950000);
insert into movie values('Jab we met',2007,'romance',10,3,5,18980000);
insert into movie values('Padmavat',2018,'historic',8,9,2,38460000);
insert into movie values('Yeh jawani hai
deewani',2013,'romance',6,9,6,581600000);

insert into movie values('Ashoka',2001,'historic',2,3,7,8796000);
insert into movie values('Happy new year',2014,'comedy',2,9,8,68960000);


insert into DVD values(1,'3 Idiots',8890);
insert into DVD values(2,'PK',8790);
insert into DVD values(3,'Bajirao Mastani',6810);
insert into DVD values(4,'Rab ne bana di jodi',7920);
```

```
insert into DVD values(5,'Gully boy',870);
insert into DVD values(6,'Jab we met',4792);
insert into DVD values(7,'Padmavat',590);
insert into DVD values(8,'Yeh jawani hai deewani',2890);
insert into DVD values(9,'Ashoka',730);
insert into DVD values(10,'Happy new year',1690);
```
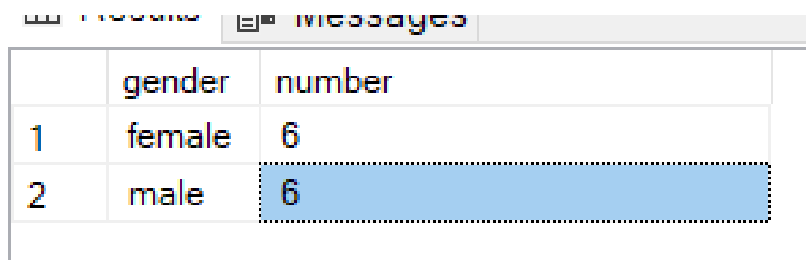
Assignment Questions

Q1. Display the count of actors and actresses.

Output:- SELECT gender,

COUNT(*) AS count

FROM actor

GROUP BY gender;

	gender	number
1	female	6
2	male	6

Q2. Display the count of movies of each genre.
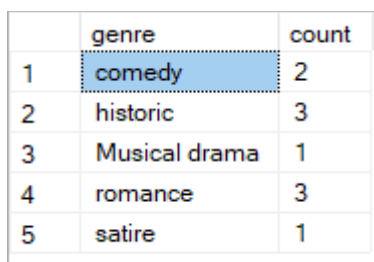
Output:-

select genre,

count(*) as count

from movie

group by genre;

	genre	count
1	comedy	2
2	historic	3
3	Musical drama	1
4	romance	3
5	satire	1

Q3. Calculate the oldest released movie of each genre.

Output : - SELECT genre, MIN(release_year) AS oldest_release FROM Movie GROUP BY genre;

	genre	oldest release
1	comedy	2009
2	historic	2001
3	Musical drama	2019
4	romance	2007
5	satire	2014

Q4. Calculate the total box office collection for movies of each genre.

Output : - select sale,

sum(sale) as 'total box office collection'

from dvd

group by sale;

	genre	total box office collection
1	comedy	1058560000
2	historic	116216000
3	Musical drama	28950000
4	romance	649540000
5	satire	789600000

Q5. Display the name of director, current count of movies and total count of movies directed by him/her.

Output : - select no_of_movies from director order by no_of_movies asc ;

	director_name	current count	total count
1	Rajkumar Hirani	2	10
2	Sanjay Leela Bhansali	2	8
3	Aditya Chopra	1	6
4	Zoya Akhtar	1	3
5	Imtiaz Ali	1	5
6	Ayan Mukerji	1	4
7	Santosh Sivan	1	9
8	Farah Khan	1	4

Q6. Display the name of lead_1 actors, their count of movies and their total DVD sales.

Output: – select lead_1, sum(sale) as total_sales from dvd group by sale;

	lead_1	no. of movies	total sales
1	1	2	17680
2	2	3	10340
3	6	1	2890
4	8	3	8270
5	10	1	4792

Q7. Show the release year and number of movies released in each year only if

more than 1 movie is released each year.

Output: -

SELECT release_year COUNT(*) AS no_of_movies

FROM movie GROUP BY release_year HAVING

  COUNT(*) > 1;

	release_year	no. of movies
1	2014	2

Q8. Display the director name and their total box office collection which should be greater than 50 crores.

Output: – SELECT box_collection, sum(box_collection) AS box_collection

FROM movie GROUP BY box_collection HAVING

  COUNT(*) > 50000000;

	director_name	total box collection
1	Rajkumar Hirani	1779200000
2	Ayan Mukerji	581600000

Q9. Give the count of movies of each genre in decreasing order of count.

Output: - SELECT genre, COUNT(*) AS no_of_movies

FROM movie GROUP BY genre

ORDER BY no_of_movies ;

	genre	count of movie
1	historic	3
2	romance	3
3	comedy	2
4	satire	1
5	Musical drama	1

Q10. Sort the movie names based on director names.

Output:- SELECT movies.movie_name,
directors.director_name

FROM movies

JOIN directors ON movies.director_id =
directors.director_id

ORDER BY directors.director_name, movies.movie_name;

	director_name	movie_name
1	Aditya Chopra	Rab ne bana di jodi
2	Ayan Mukerji	Yeh jawani hai deewani
3	Farah Khan	Happy new year
4	Imtiaz Ali	Jab we met
5	Rajkumar Hirani	3 Idiots
6	Rajkumar Hirani	PK
7	Sanjay Leela Bhansali	Bajirao Mastani
8	Sanjay Leela Bhansali	Padmavat
9	Santosh Sivan	Ashoka
10	Zoya Akhtar	Gully boy