LAB REPORT ON DATABASE QUERIES

Course Name: Sessional based on CSE 3101 (Database System)

Course No.: 3102

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Submitted By –

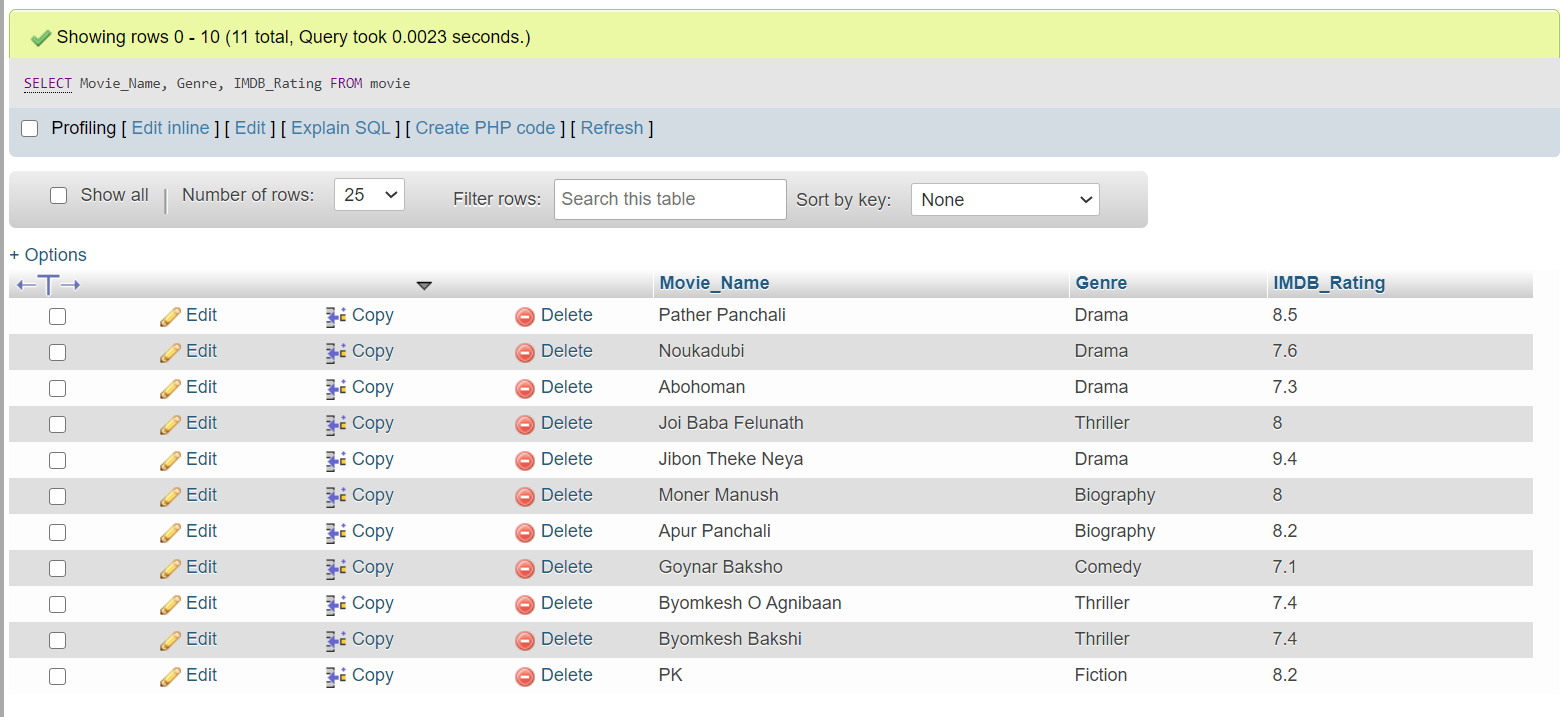
Anika Tabassum Era

Roll – 1703176

CSE’17, RUET

**Query 1.1**

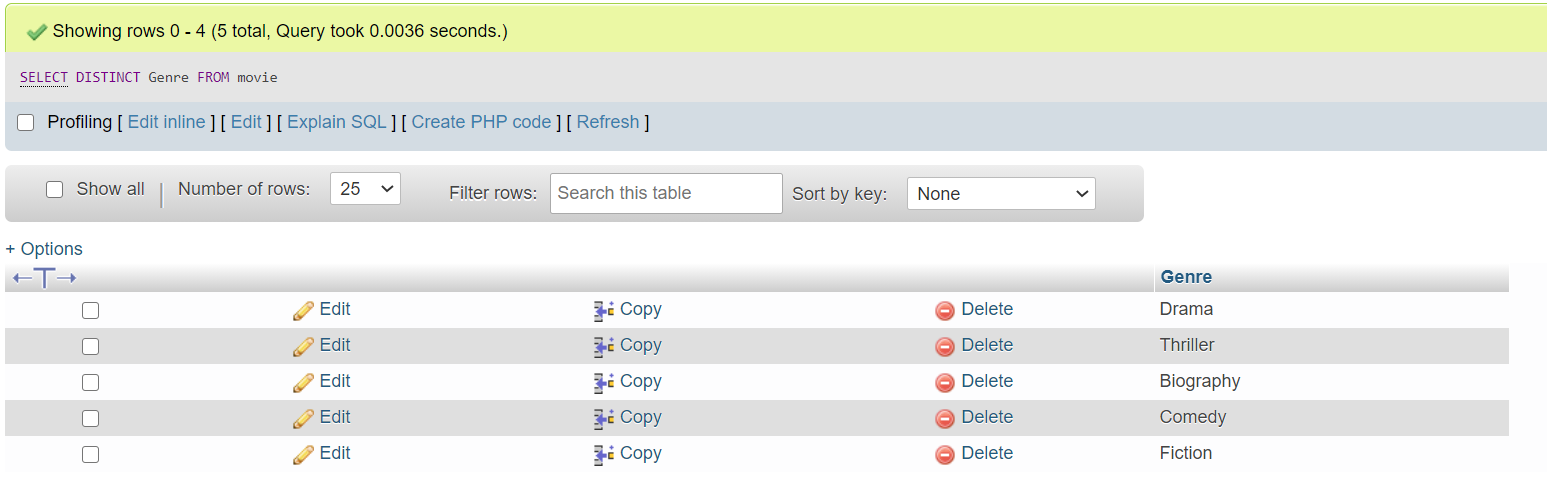
Find the name, genre, IMDB-rating of all the movies.

SELECT Movie\_Name, Genre, IMDB\_Rating FROM movie;

**Query 1.2**

Display all the distinct movie-genres.

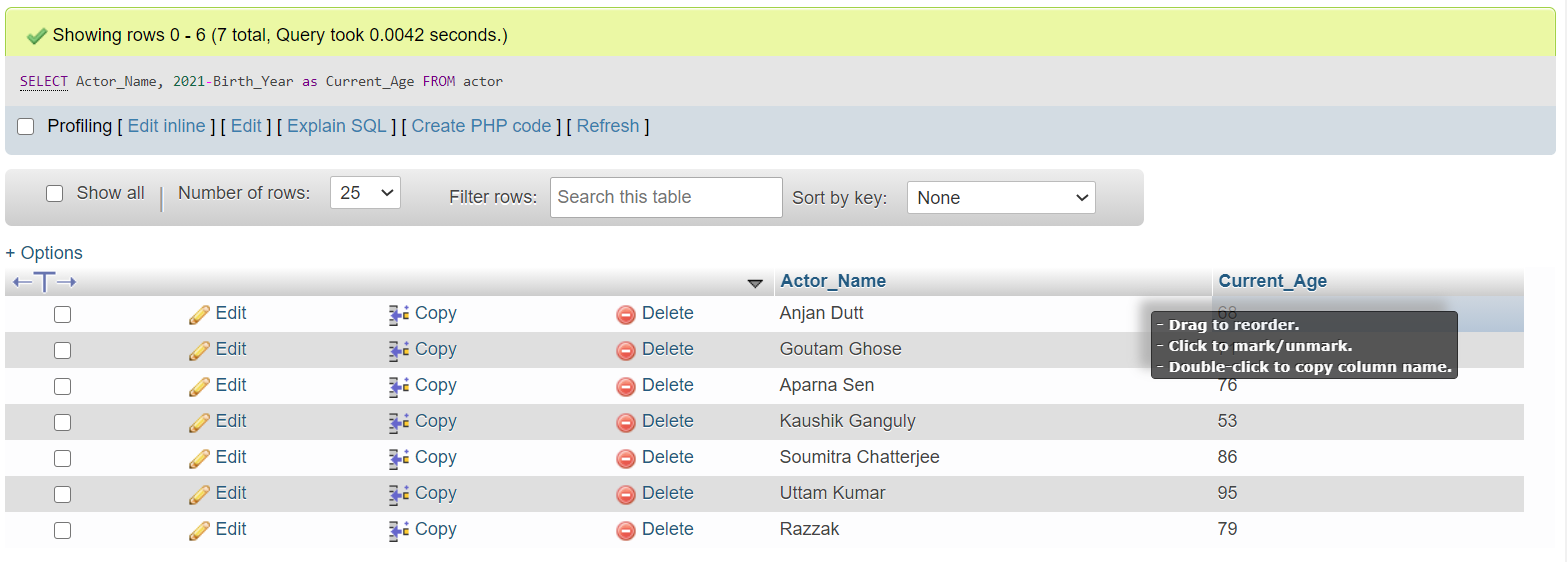
SELECT DISTINCT (Genre) FROM movie;



**Query 1.3**

Find the name and current age of all the actors.

SELECT Actor\_Name, 2021-Birth\_Year as Current\_Age FROM actor;



**Query 1.4**

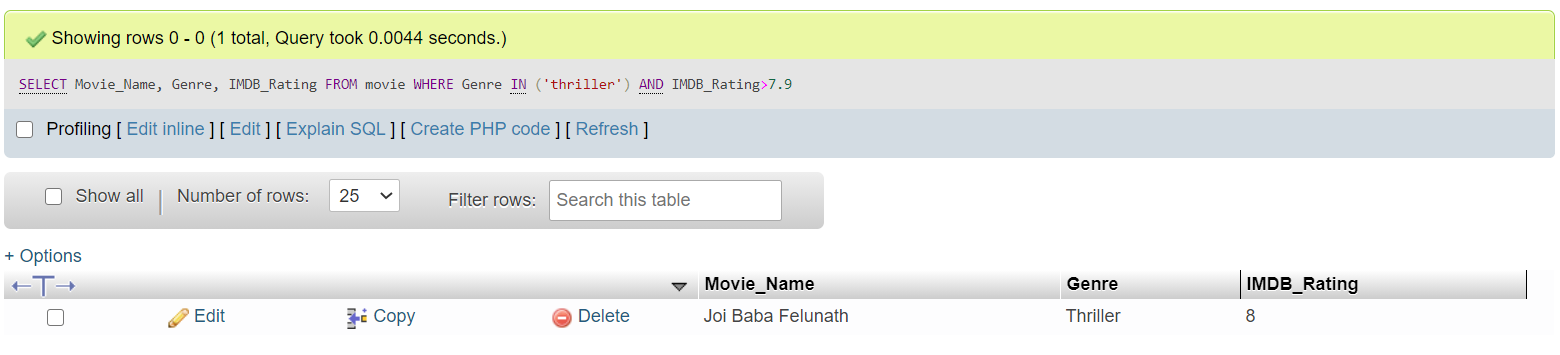
Find all the movies of the thriller genre with an IMDB rating.

greater than or equal to 8.0.

SELECT Movie\_Name, Genre, IMDB\_Rating FROM movie WHERE Genre IN ('thriller') AND IMDB\_Rating > 7.9;

Or

SELECT Movie\_Name, Genre, IMDB\_Rating FROM movie WHERE Genre IN ('thriller') AND IMDB\_Rating >= 8;



**Query 1.5**

Find the movie\_name, release year, IMDB rating, and the name of the

director of all the movies.

SELECT movie.Movie\_Name, movie.Year, movie.IMDB\_Rating, director.Director\_Name FROM movie JOIN director using (Person\_ID);

or

SELECT movie.Movie\_Name, movie.Year, movie.IMDB\_Rating, director.Director\_Name FROM movie, director WHERE movie.Person\_ID = director.Person\_ID;

or

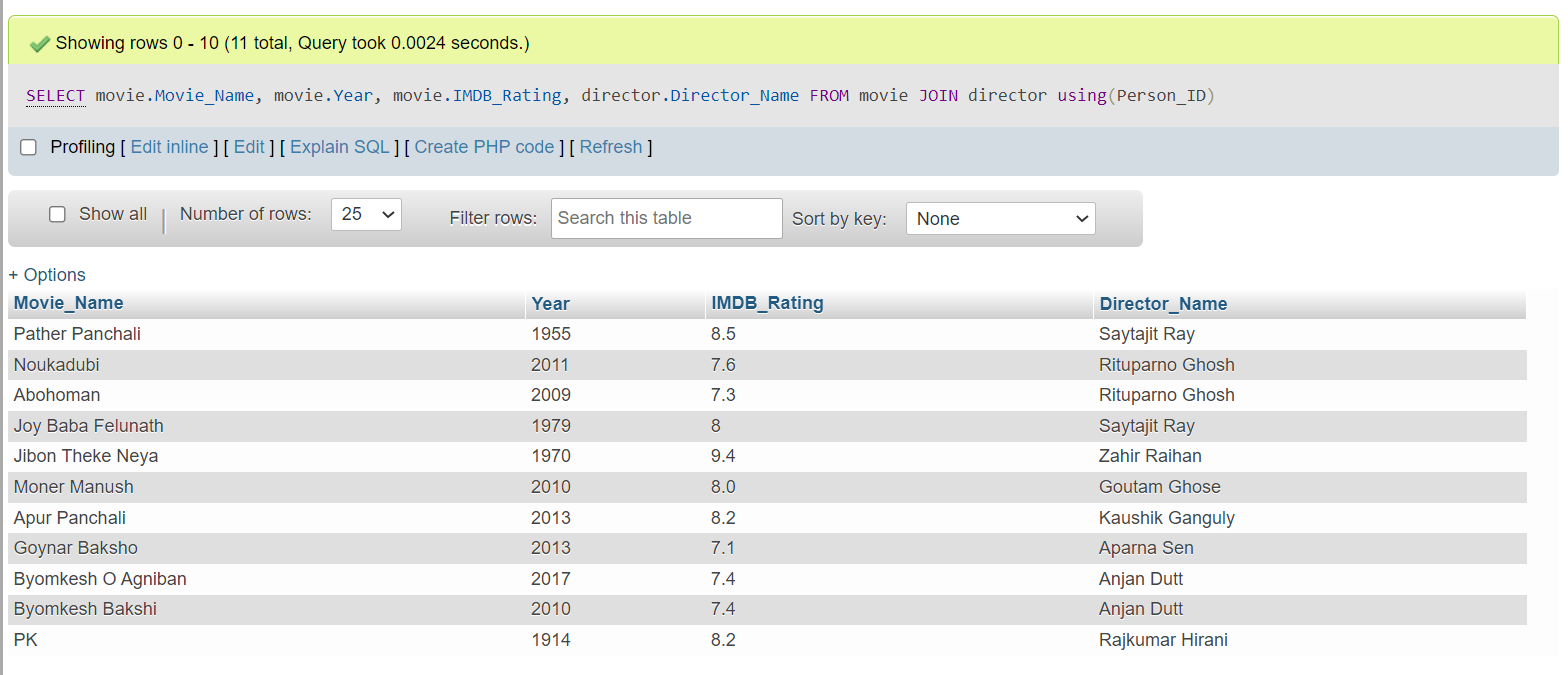
SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie NATURAL JOIN director;

or

SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie INNER JOIN director ON movie.Person\_ID=director.Person\_ID;

or

SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie INNER JOIN director USING(Person\_ID);

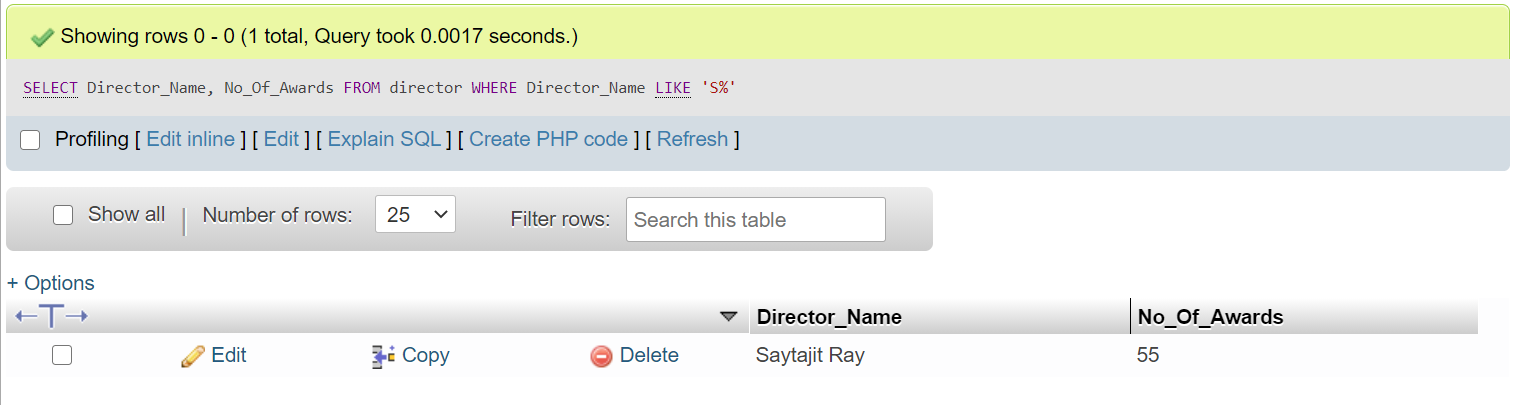


**Query 1.6**

Find the name and number of awards of those directors whose

name starts with an ‘S’.

SELECT Director\_Name, No\_Of\_Awards FROM director WHERE Director\_Name LIKE 'S%';

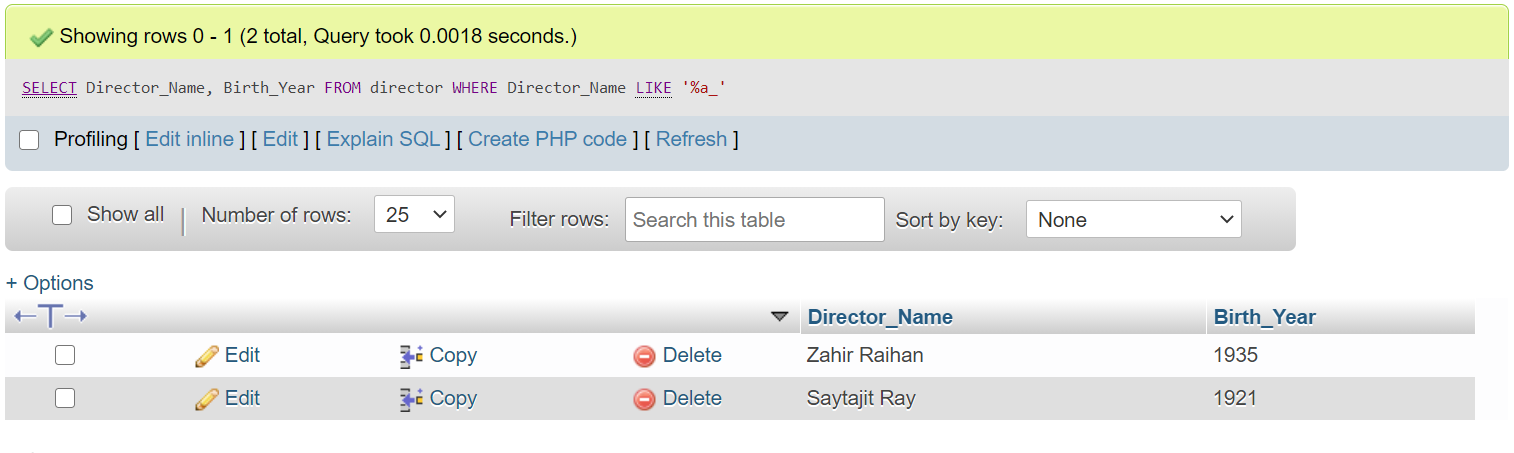


**Query 1.7**

Find the name and birth year of those directors whose name

contains an ‘a’ as its 2nd last character.

SELECT Director\_Name, Birth\_Year FROM director WHERE Director\_Name LIKE '%a\_';

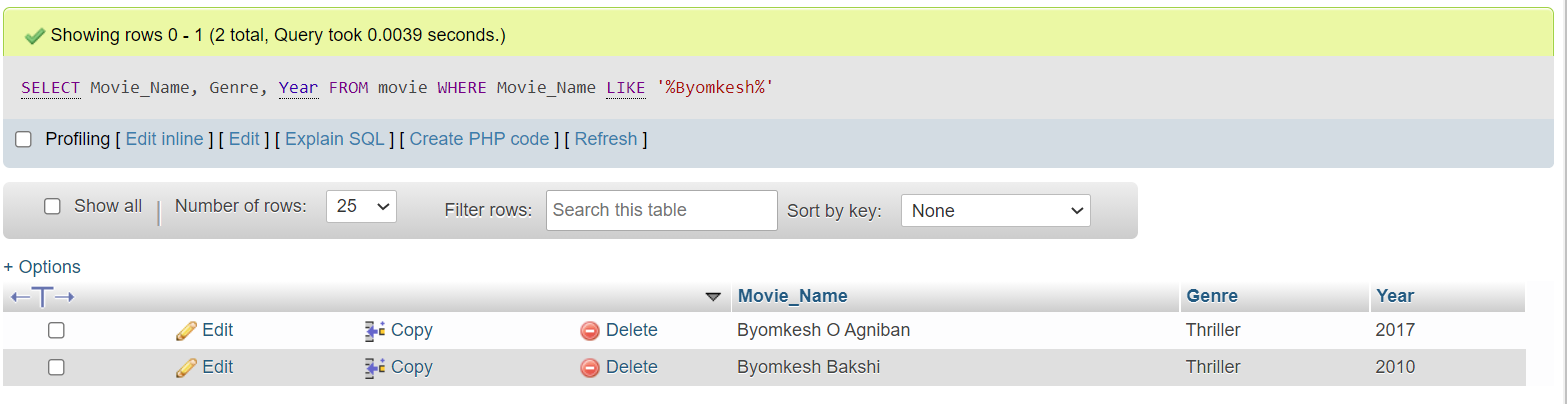


**Query 1.8**

Find the name, release year, and genre of all the movies which

contain the word ‘Byomkesh’ anywhere in their name.

SELECT Movie\_Name, Genre, Year FROM movie WHERE Movie\_Name LIKE '%Byomkesh%';

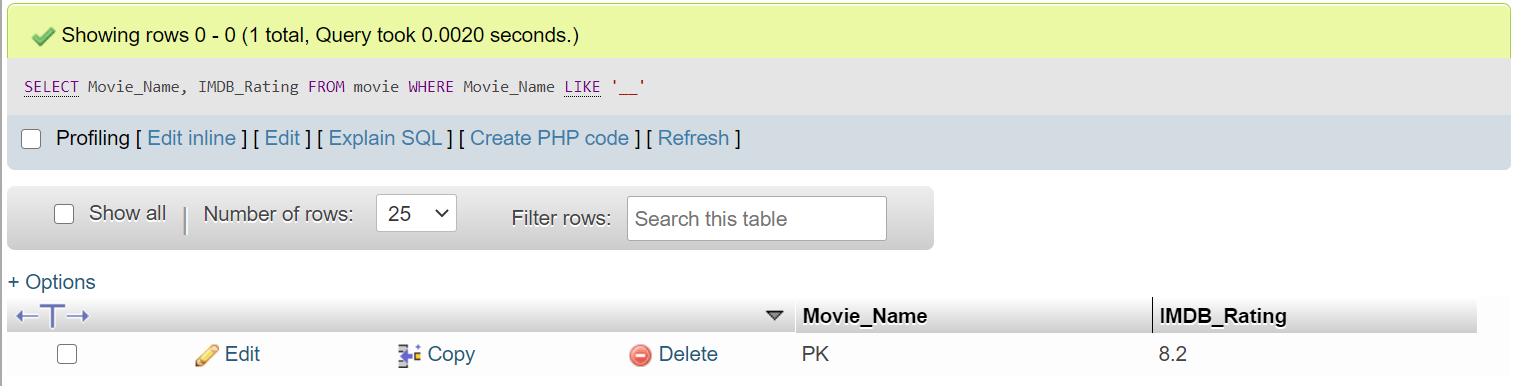


**Query 1.9**

Find the name and IMDB rating of all the movies whose name

consists of only 2 characters.

SELECT Movie\_Name, IMDB\_Rating FROM movie WHERE Movie\_Name LIKE '\_\_';

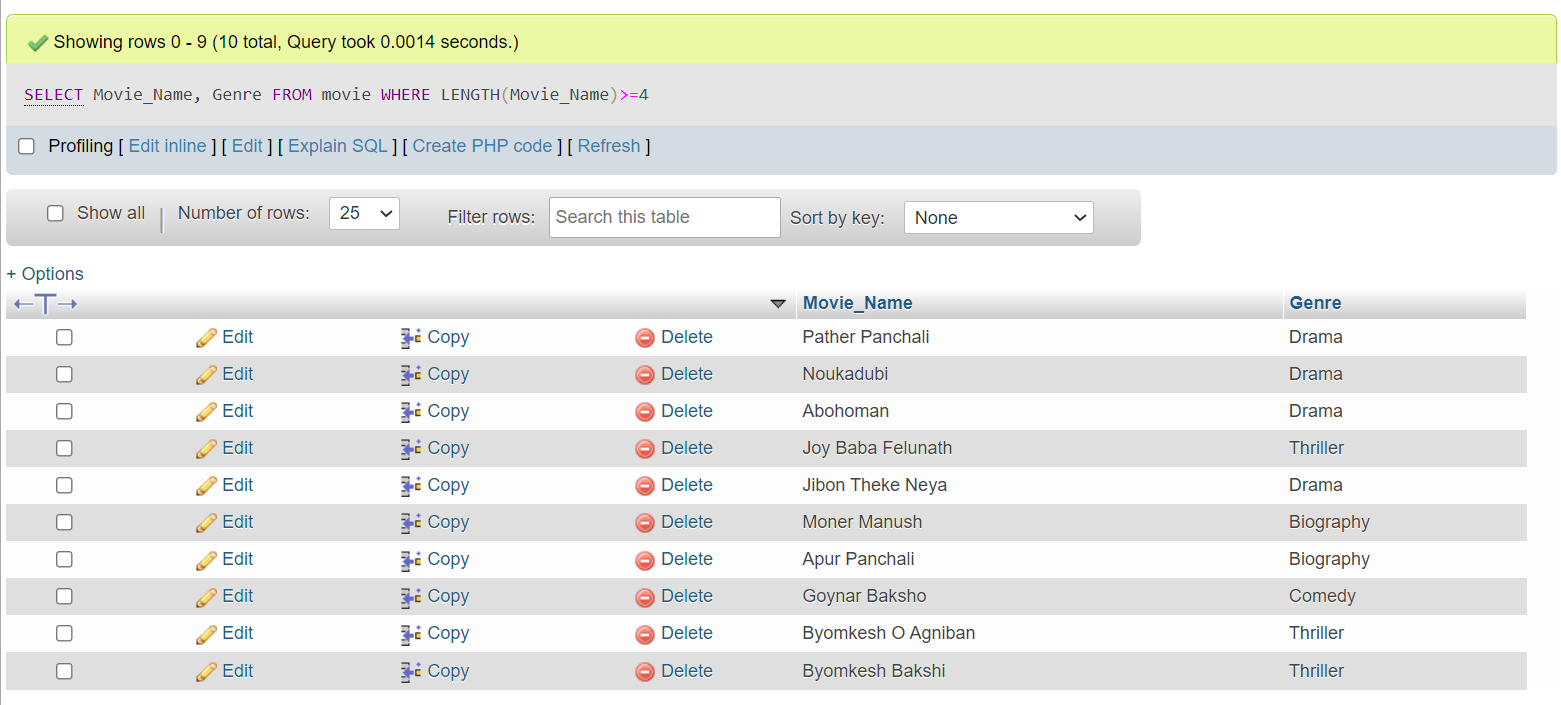


**Query 2.0**

Find the name and genre of all the movies whose name consists

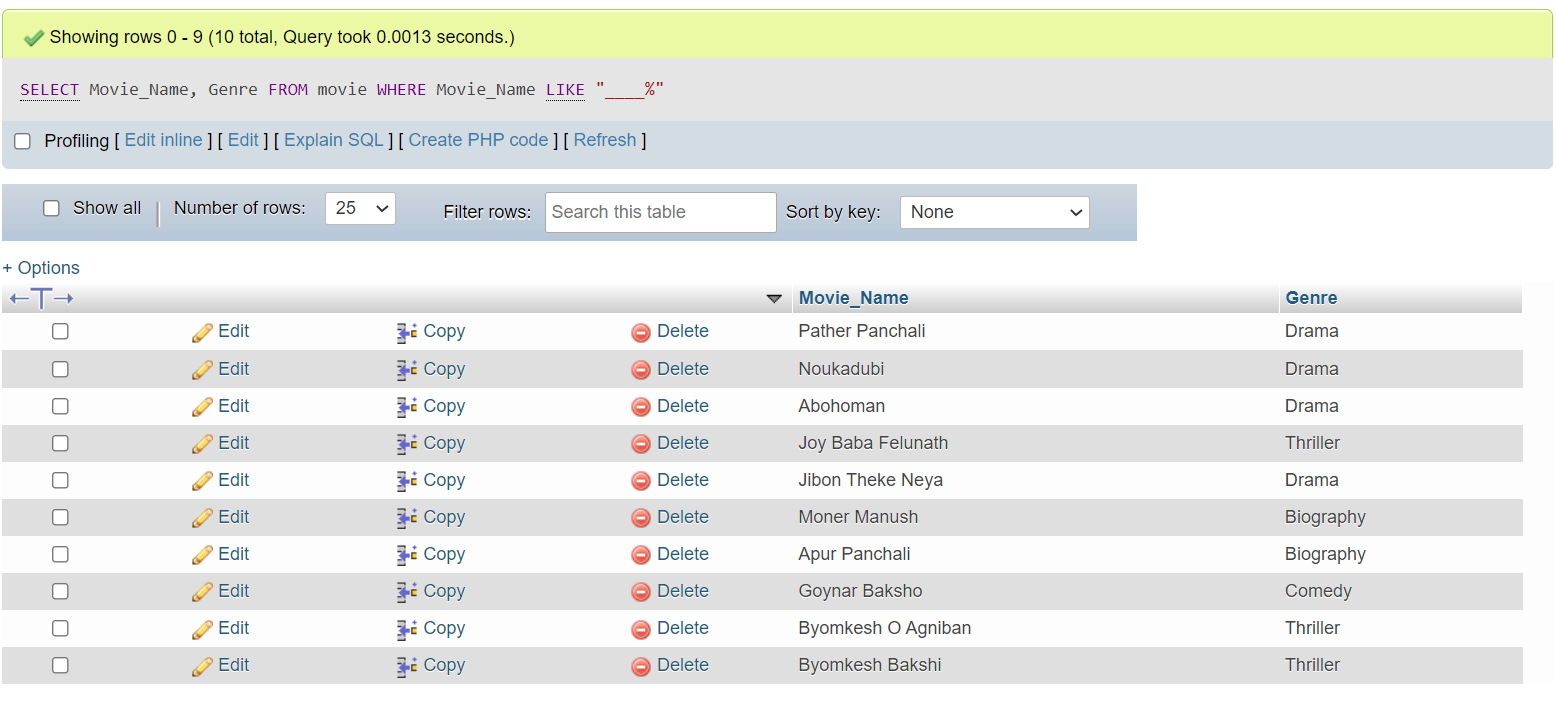
of at least 4 characters.

SELECT Movie\_Name, Genre FROM movie WHERE LENGTH(Movie\_Name)>=4;



or

SELECT Movie\_Name, Genre FROM movie WHERE Movie\_Name LIKE "\_\_\_\_%"



**Query 2.1**

Find the name and IMDB rating of all the movies which contain

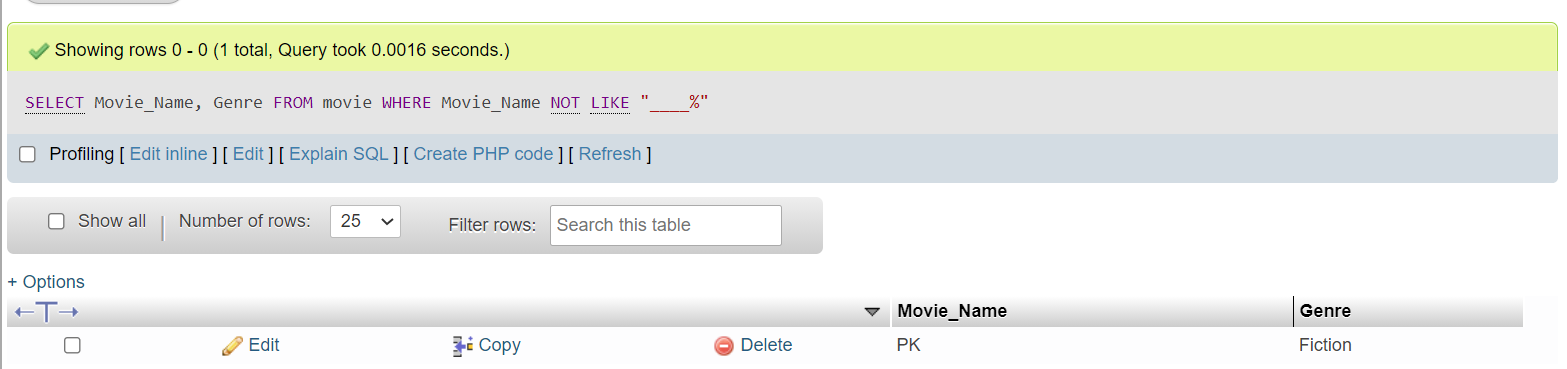
either 1 or, 2 or, 3 or, 4 characters in their name.

SELECT Movie\_Name, IMDB\_Rating FROM movie WHERE LENGTH(Movie\_Name)=1 OR LENGTH(Movie\_Name)=2 OR LENGTH(Movie\_Name)=3 OR LENGTH(Movie\_Name)=4;



or

SELECT Movie\_Name, Genre FROM movieWHERE Movie\_Name NOT LIKE "\_\_\_\_%"



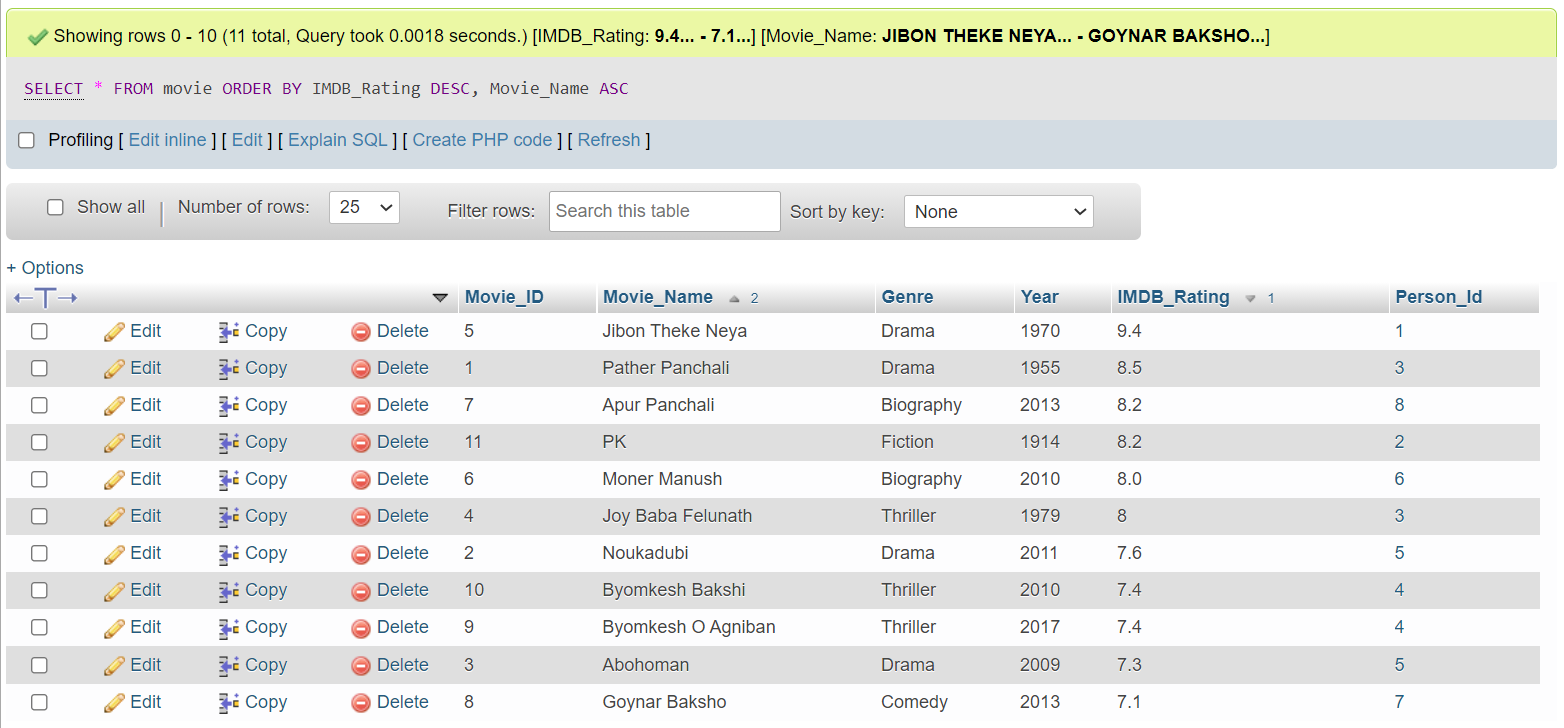
**Query 2.2**

Display all the movies according to their IMDB rating (in

descending order); if multiple movies have the same IMDB rating then

rearrange those movies alphabetically according to their names.

SELECT \* FROM movie ORDER BY IMDB\_Rating DESC, Movie\_Name ASC;

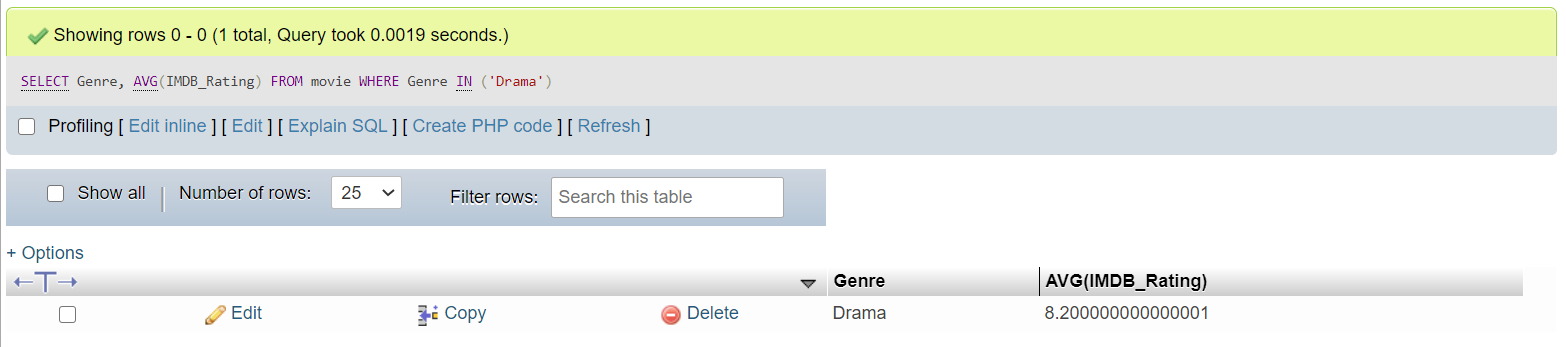


**Query 2.3**

Find the average IMDB rating of all the movies of the drama

genre.

SELECT Genre, AVG(IMDB\_Rating) FROM movie WHERE Genre IN ('Drama');



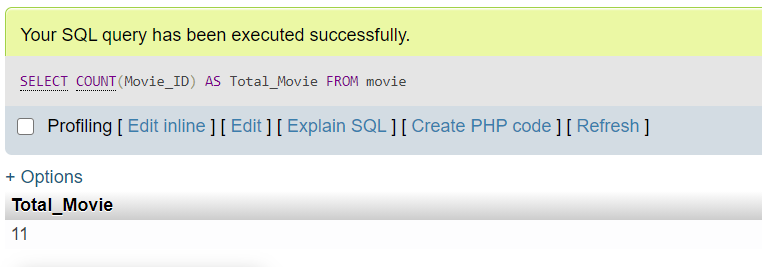
**Query 2.4**

Find the total number of movies in the database.

SELECT COUNT(Movie\_ID) AS Total\_Movie FROM movie;

or

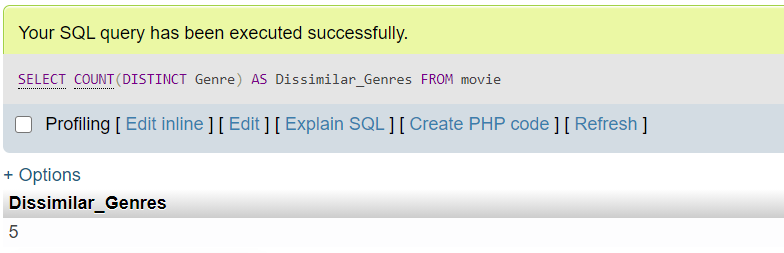
SELECT COUNT(Movie\_Name) AS Total\_Movie FROM movie;



**Query 2.5**

Find how many movie-genres are there in the database.

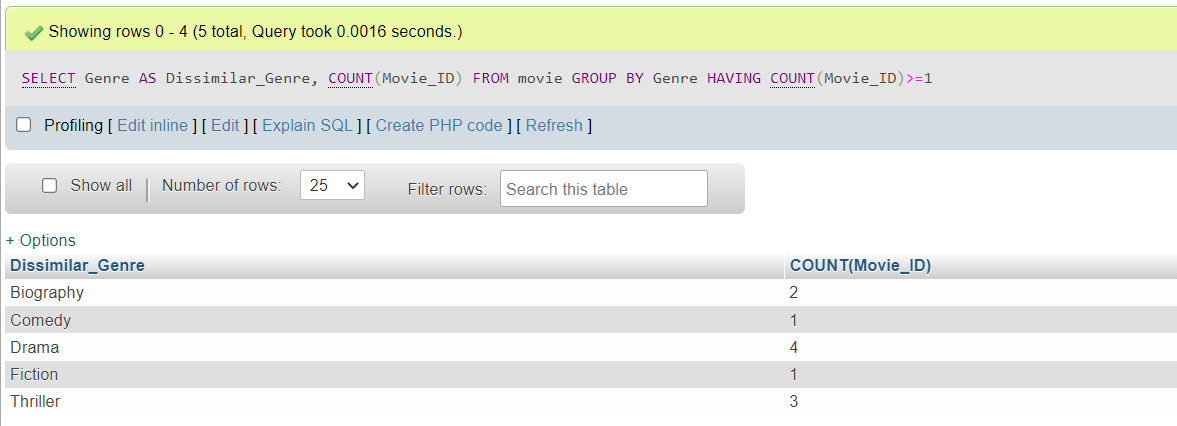
SELECT COUNT(DISTINCT Genre) AS Dissimilar\_Genres FROM movie;



**Query 2.6**

Find the total number of movies in each genre.

SELECT Genre AS Dissimilar\_Genre,COUNT(Movie\_ID) FROM movie GROUP BY Genre HAVING COUNT(Movie\_ID)>=1;



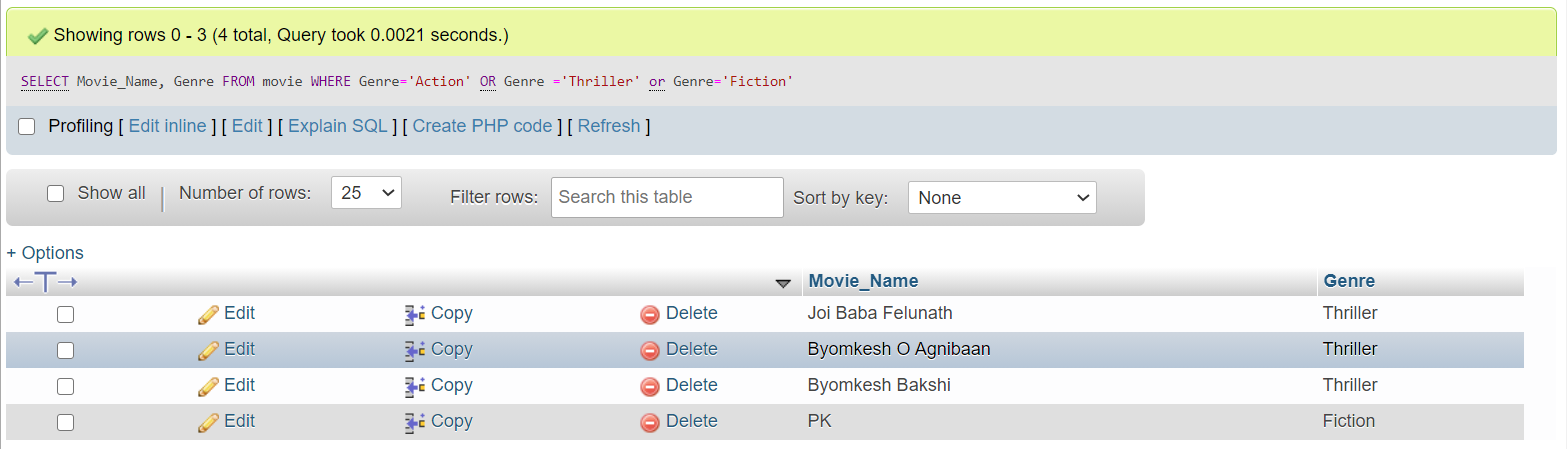
**Query 2.7**

Find all the movies of action, thriller/fiction genre.

SELECT Movie\_Name, Genre FROM movie WHERE Genre='Action' OR Genre ='Thriller' OR Genre='Fiction';

or

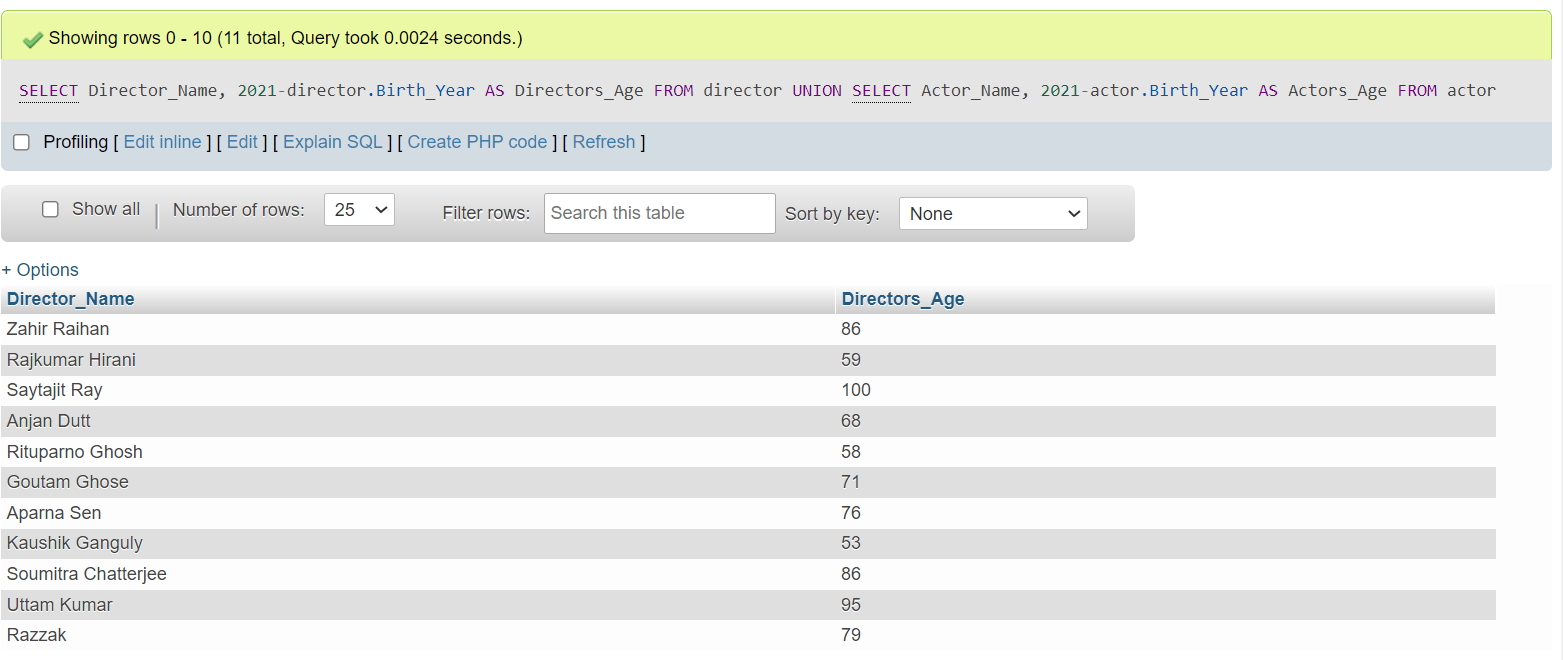
SELECT Movie\_Name, Genre FROM movie WHERE Genre IN ('Action', 'Thriller', 'Fiction');



**Query 2.8**

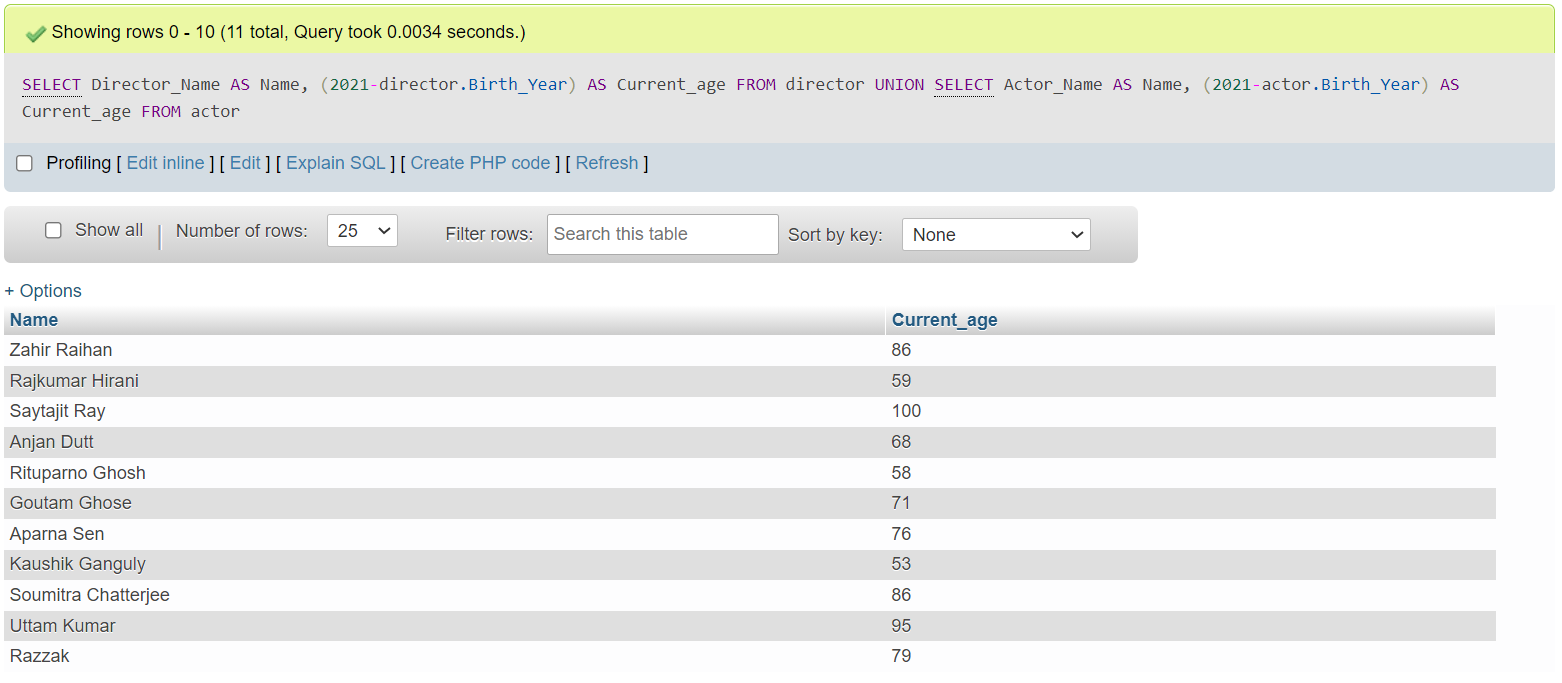
Find the Name and current age of all the directors and actors.

SELECT Director\_Name, 2021-director.Birth\_Year AS Directors\_Age FROM director UNION SELECT Actor\_Name, 2021-actor.Birth\_Year AS Actors\_Age FROM actor;



or

SELECT Director\_Name AS Name, (2021-director.Birth\_Year) AS Current\_age FROM director UNION SELECT Actor\_Name AS Name, (2021-actor.Birth\_Year) AS Current\_age FROM actor;

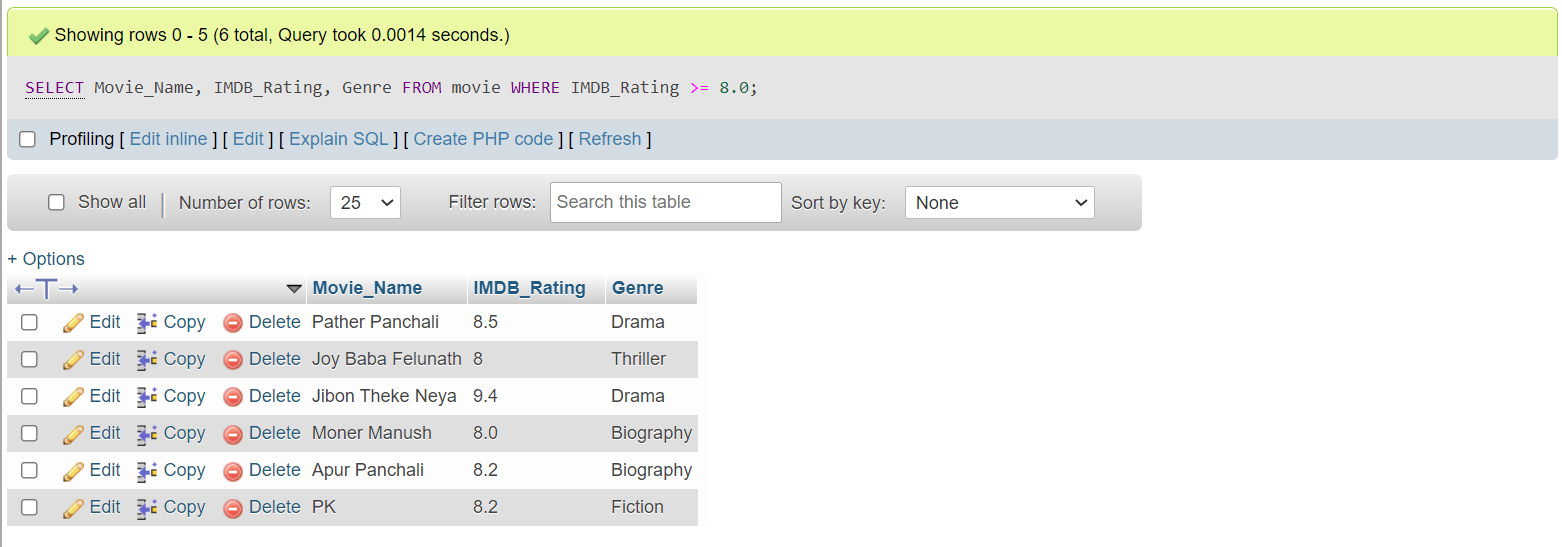


**Query 3.1**

Display the name, IMDB rating and genre of all the movies with

an IMDB rating greater than or equal to 8.0.

SELECT Movie\_Name, IMDB\_Rating, Genre FROM movie WHERE IMDB\_Rating >= 8.0;



**Query 3.2**

Display all the distinct movie-genres and the average IMDb

rating of each movie-genre.

SELECT Genre, AVG(IMDB\_rating) AS Average\_IMDB\_Rating FROM movie GROUP BY Genre;

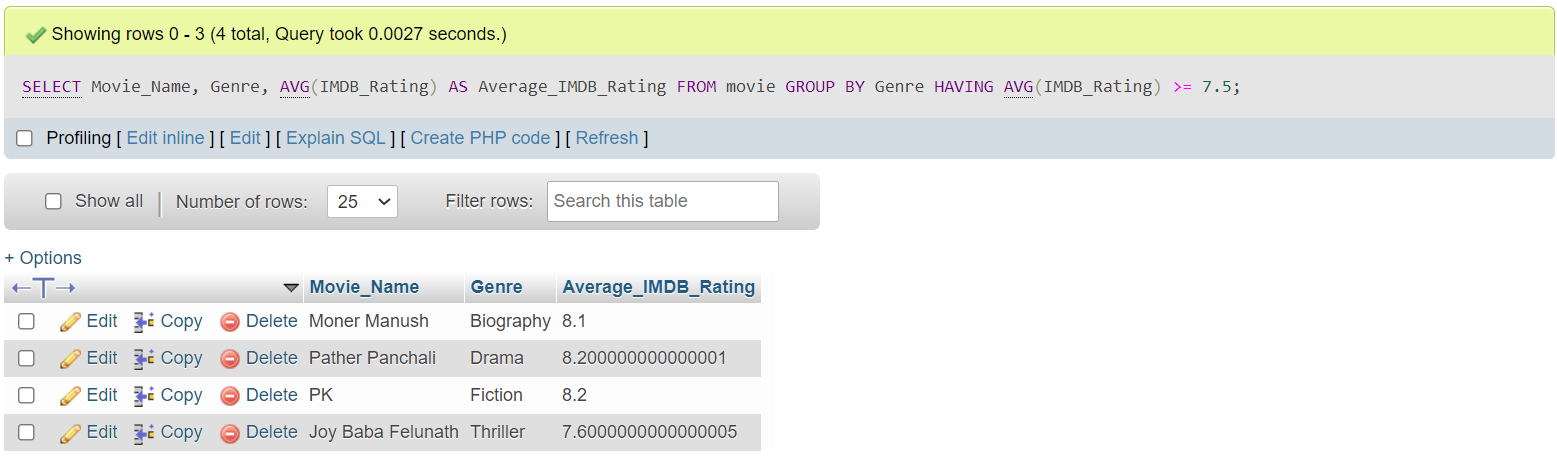


**Query 3.3**

Find the name and the average IMDb rating of those

movie-genres whose average IMDb rating is greater than or equal to 7.5.

SELECT Movie\_Name, Genre, AVG(IMDB\_Rating) AS Average\_IMDB\_Rating FROM movie GROUP BY Genre HAVING AVG(IMDB\_Rating) >= 7.5;



**Query 3.4**

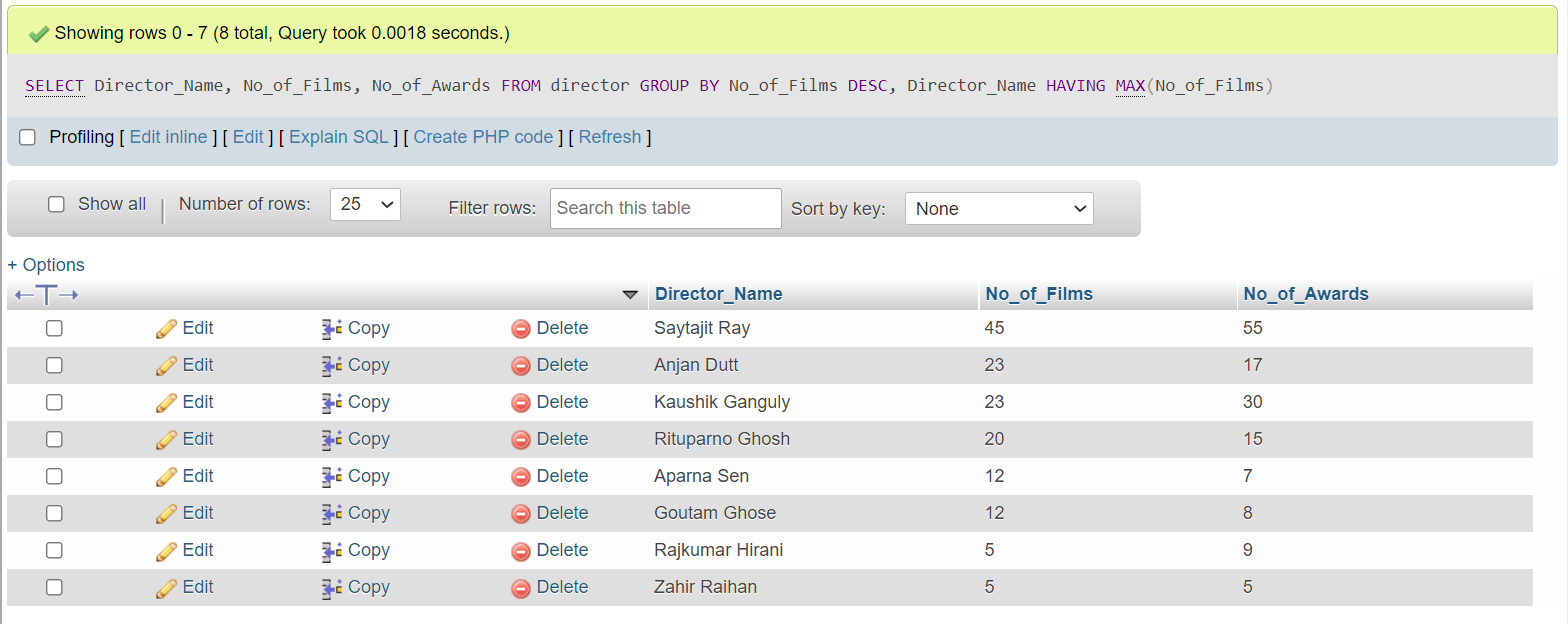
Find the name, number of films and number of awards of the

director who directed the most number of films

SELECT Director\_Name, No\_of\_Films, No\_of\_Awards FROM director GROUP BY No\_of\_Films DESC, Director\_Name HAVING MAX(No\_of\_Films);

Or

SELECT Director\_Name, No\_of\_Films, No\_of\_Awards FROM director GROUP BY Director\_Name HAVING MAX(No\_of\_Films) ORDER BY No\_of\_Films DESC



**Query 3.5**

Find the name, current age, number of films and number of

awards of the youngest actor.

SELECT Actor\_Name, 2021-Birth\_Year AS Youngest\_aged, No\_of\_Films, No\_of\_Awards FROM actor WHERE 2021-Birth\_Year = (SELECT MIN(2021-Birth\_Year) FROM actor);

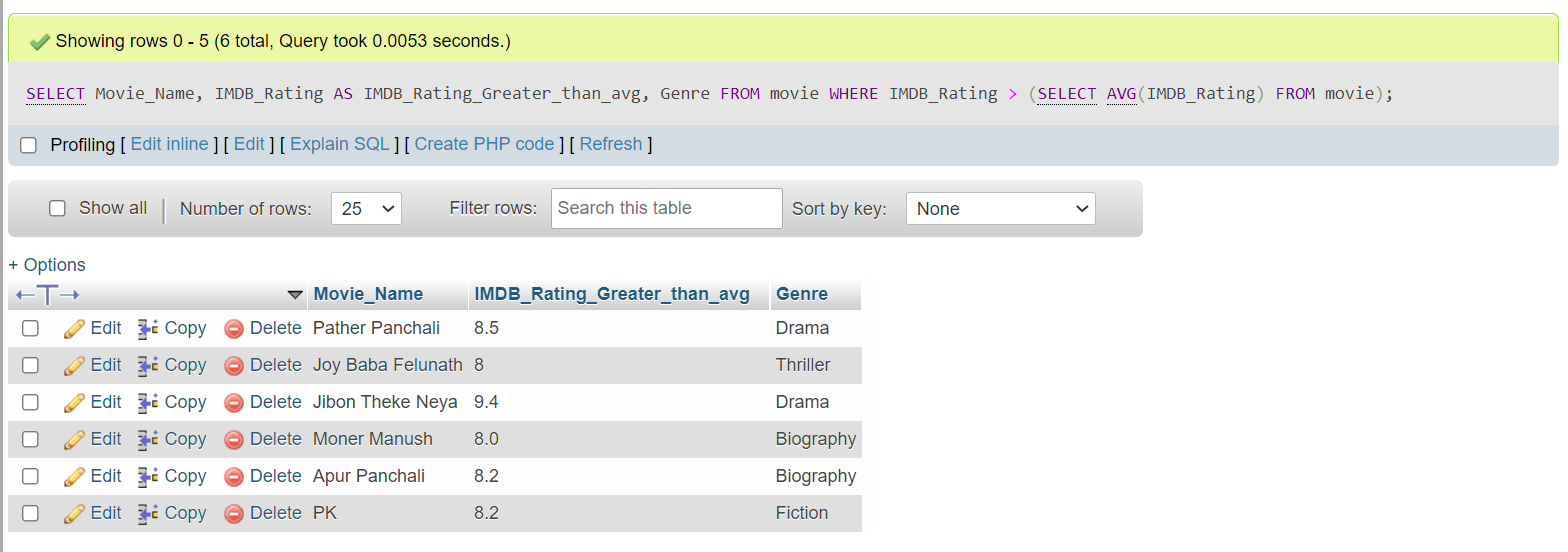


**Query 3.6**

Find the name, IMDb rating and genre of those movies whose

IMDb Rating is above average.

SELECT Movie\_Name, IMDB\_Rating AS IMDB\_Rating\_Greater\_than\_avg, Genre FROM movie WHERE IMDB\_Rating > (SELECT AVG(IMDB\_Rating) FROM movie);



**Query 3.7**

Find the name and average IMDb rating of those movie-genres

whose average IMDb rating is below average.

SELECT Genre, AVG(IMDB\_Rating) AS Below\_avg FROM movie GROUP BY Genre HAVING AVG(IMDB\_Rating) < (SELECT AVG(IMDB\_Rating) FROM movie);



**Query 3.8**

Among all the movie genres, find the highest average IMDb

rating.

SELECT Genre, AVG(IMDB\_Rating) AS High\_avg\_Genre FROM movie

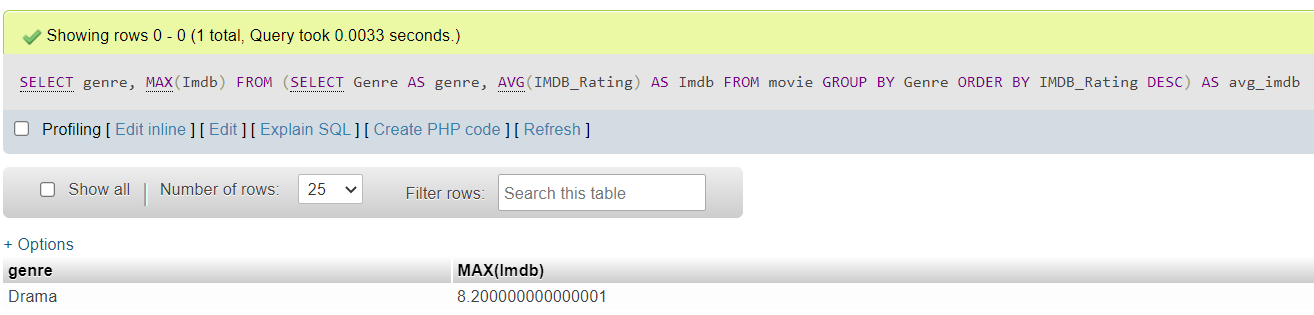
GROUP BY Genre HAVING AVG(IMDB\_Rating) >= ALL(SELECT AVG(IMDB\_Rating) FROM movie GROUP BY Genre);

Or

SELECT AVG(IMDB\_Rating) AS High\_avg, Genre FROM movie GROUP BY Genre ORDER BY AVG(IMDB\_Rating) DESC LIMIT 1

or

SELECT genre, MAX(Imdb) FROM (SELECT Genre AS genre, AVG(IMDB\_Rating) AS Imdb FROM movie GROUP BY Genre ORDER BY IMDB\_Rating DESC ) AS avg\_imdb;



**Query 4.1**

Find the name and age of all the movie characters who are not

teenagers.

SELECT Character\_Name, Age FROM movie\_characters WHERE Age < 13 OR Age > 19;



**Query 4.2**

Find the movie ID of all the movies and the number of

movie-characters in each movie

SELECT Movie\_ID, COUNT(Character\_ID) AS Character\_number FROM movie\_character\_relationship GROUP BY Movie\_ID;

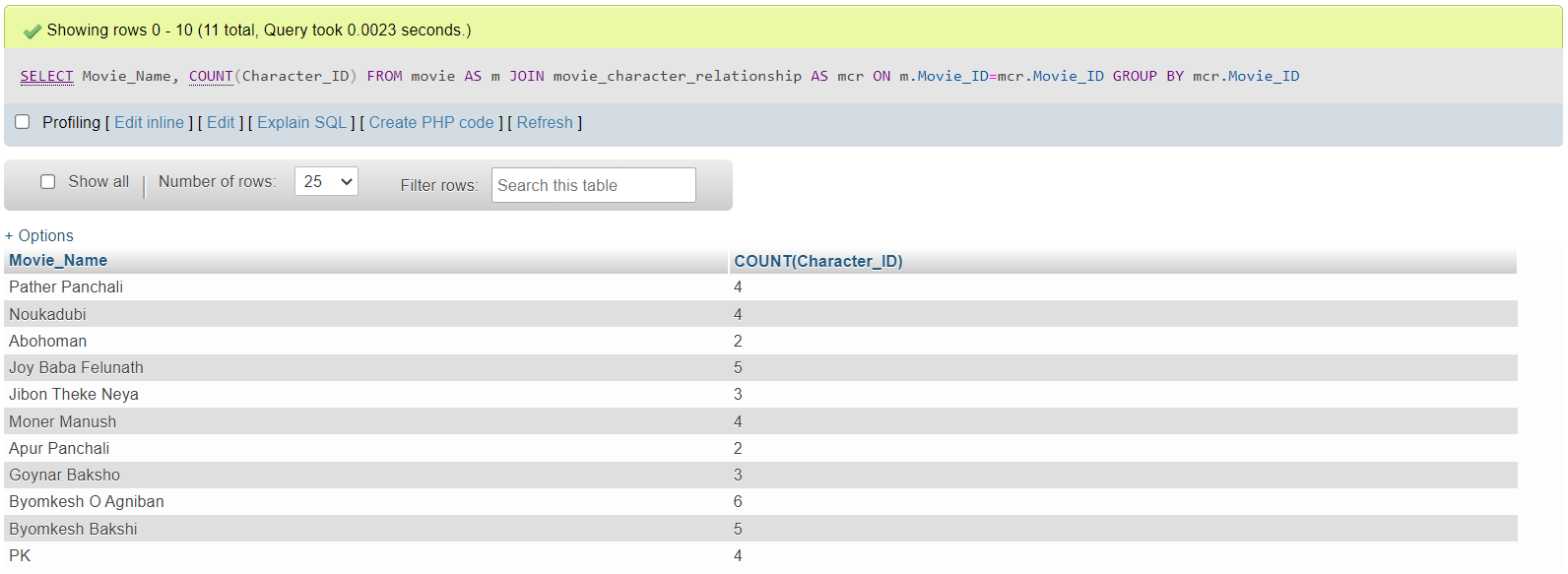


**Query 4.3**

Find the movie name of all the movies and the number of

movie-characters in each movie.

SELECT Movie\_Name, COUNT(Character\_ID) FROM movie AS m JOIN movie\_character\_relationship AS mcr ON m.Movie\_ID=mcr.Movie\_ID GROUP BY mcr.Movie\_ID;



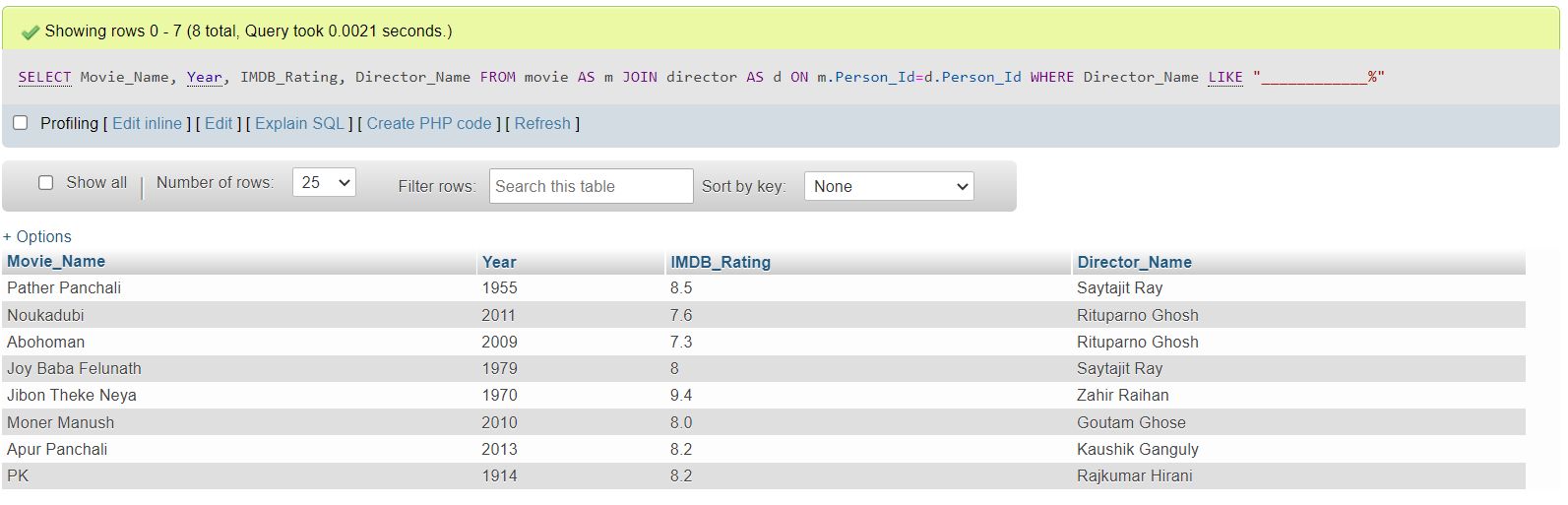
**Query 4.4**

Find the name, year of release, IMDB rating and the name of the

director of all the movies that contain at least 12 characters (including

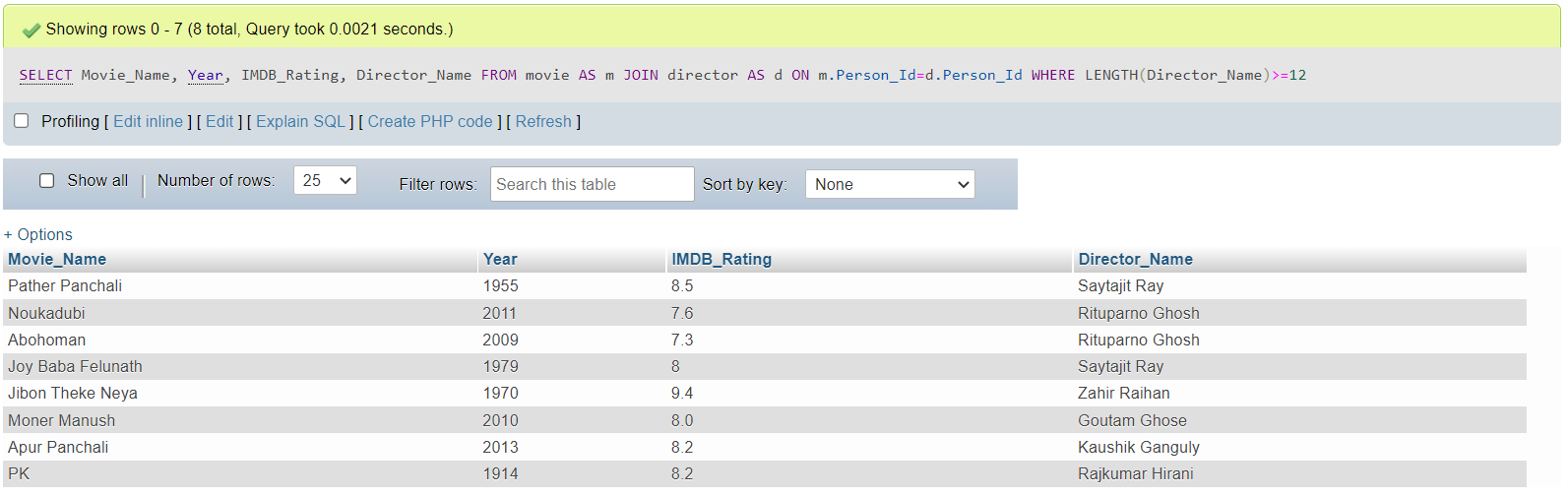
spaces) in their name.

SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie AS m JOIN director AS d ON m.Person\_Id=d.Person\_Id WHERE Director\_Name LIKE "\_\_\_\_\_\_\_\_\_\_\_\_%";



or

SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie AS m JOIN director AS d ON m.Person\_Id=d.Person\_Id WHERE LENGTH(Director\_Name)>=12;



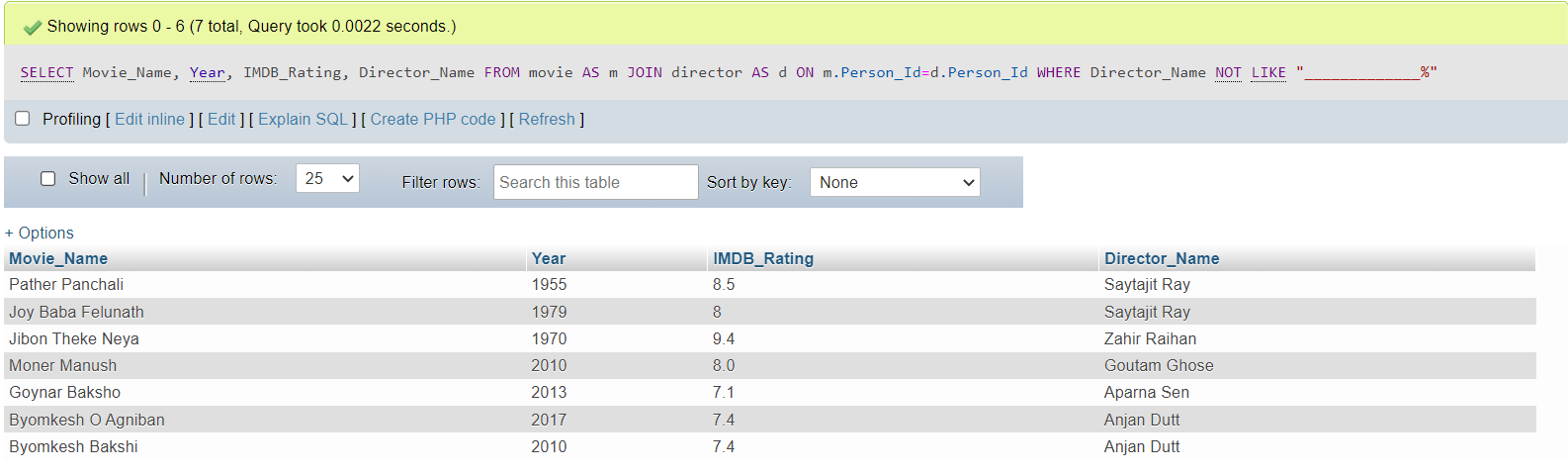
**Query 4.5**

Find the name, year of release, IMDB rating and the name of the

director of all the movies that contain at most 12 characters (including

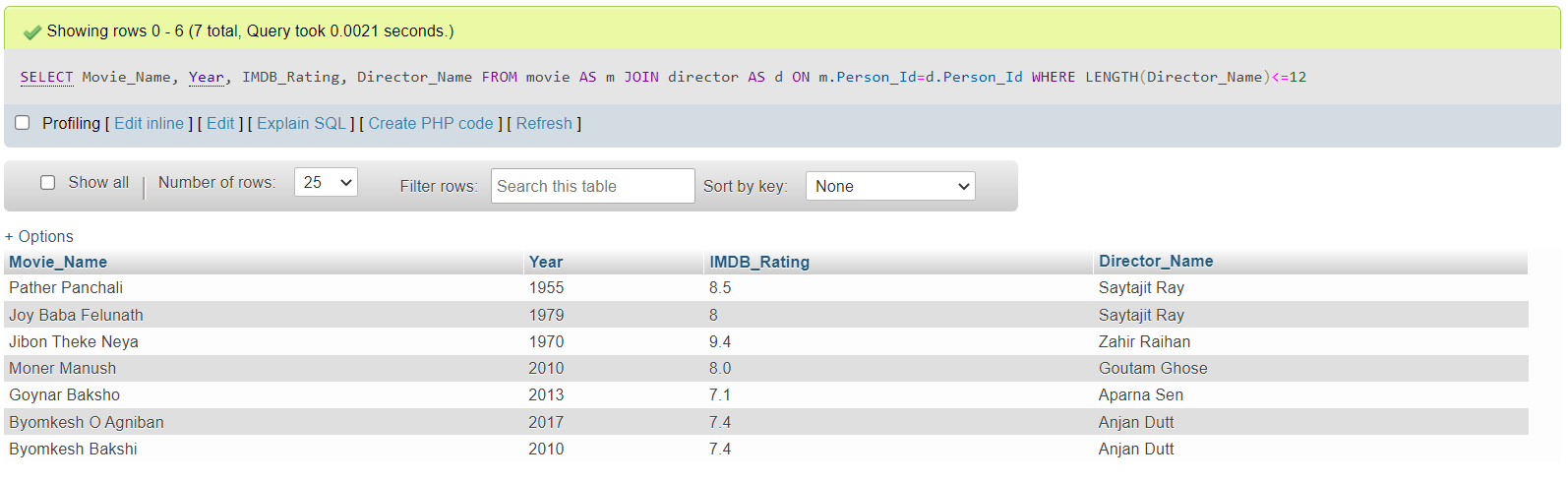
spaces) in their name.

SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie AS m JOIN director AS d ON m.Person\_Id=d.Person\_Id WHERE LENGTH(Director\_Name)<=12;



or

SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie AS m JOIN director AS d ON m.Person\_Id=d.Person\_Id WHERE Director\_Name NOT LIKE "\_\_\_\_\_\_\_\_\_\_\_\_\_%";



**Query 4.6**

Find the name, year of release, IMDB rating of all the movies of

Byomkesh (N.B.: A movie of Byomkesh may not contain the term

‘Byomkesh’ in its name).

SELECT Movie\_Name, Character\_Name, Year, IMDB\_Rating

FROM movie\_character\_relationship AS mcr

JOIN movie AS m

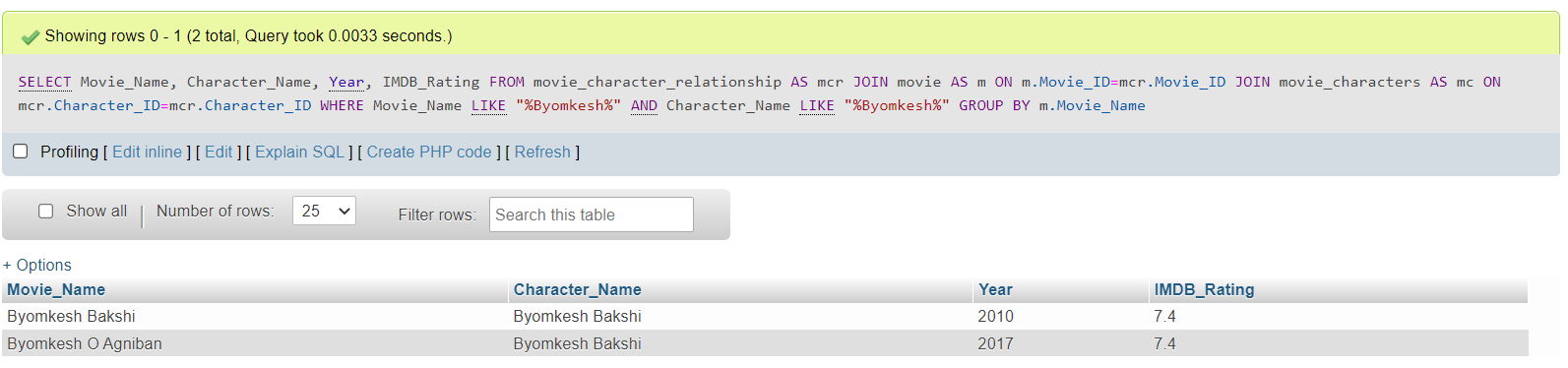
ON m.Movie\_ID=mcr.Movie\_ID

JOIN movie\_characters AS mc

ON mcr.Character\_ID=mcr.Character\_ID

WHERE Movie\_Name LIKE "%Byomkesh%" AND Character\_Name LIKE "%Byomkesh%"

GROUP BY m.Movie\_Name;



or

SELECT Movie\_Name, Character\_Name, Year, IMDB\_Rating

FROM movie\_character\_relationship AS mcr

JOIN movie AS m

ON m.Movie\_ID=mcr.Movie\_ID

JOIN movie\_characters AS mc

ON mcr.Character\_ID=mc.Character\_ID

WHERE Character\_Name LIKE "%Byomkesh%"



**Query 4.7**

Find the name and age of all the characters from the movies of

Feluda (N.B.: A movie of Feluda may not contain the term ‘Feluda’ in its

name).

SELECT Character\_Name AS Characters\_From\_Feluda, Age

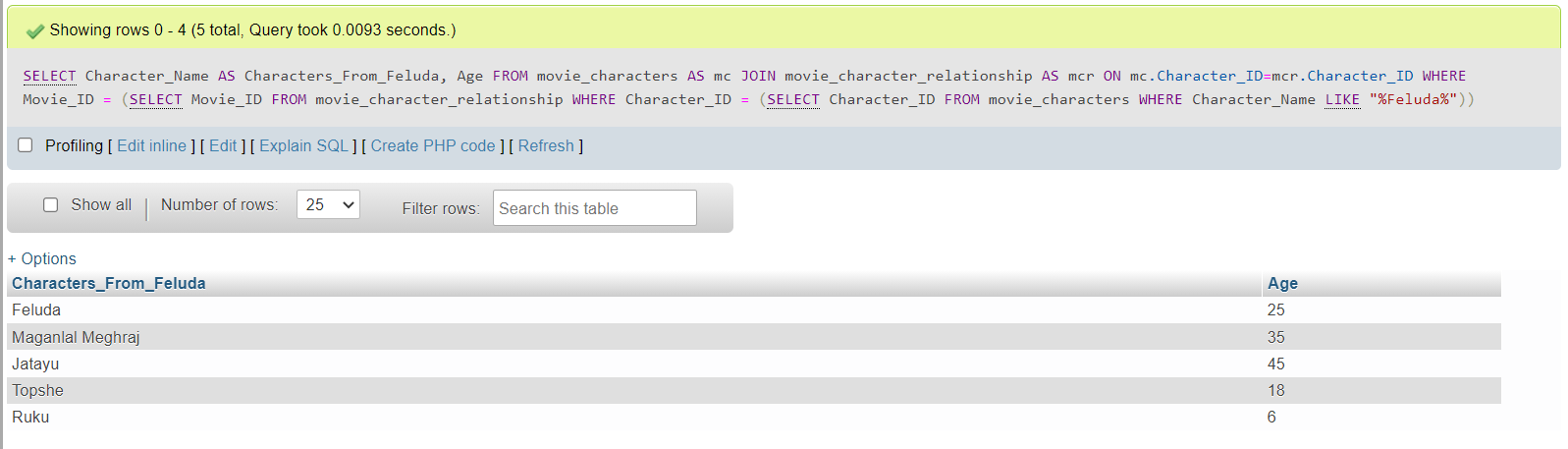
FROM movie\_characters AS mc

JOIN movie\_character\_relationship AS mcr

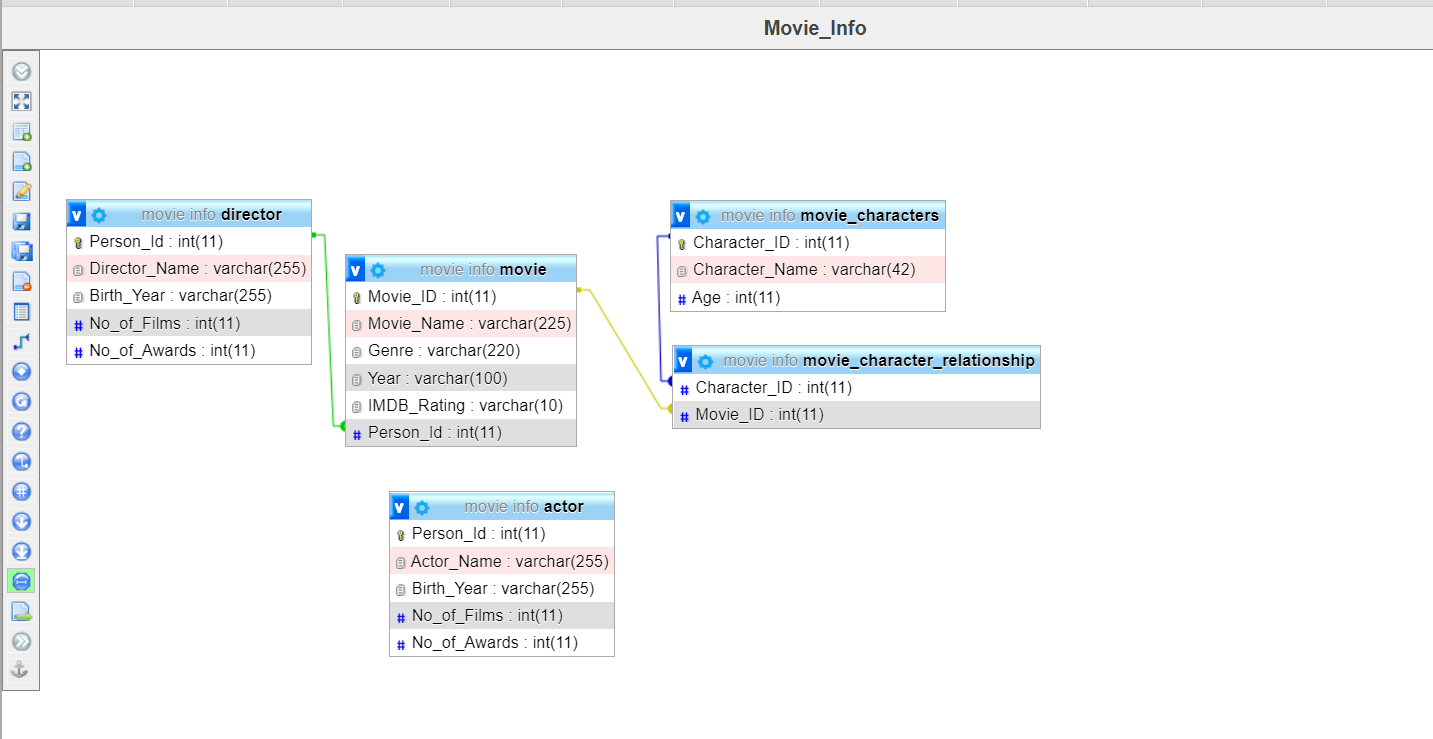
ON mc.Character\_ID=mcr.Character\_ID

WHERE Movie\_ID IN (SELECT Movie\_ID FROM movie\_character\_relationship

WHERE Character\_ID IN (SELECT Character\_ID FROM movie\_characters WHERE Character\_Name LIKE "%Feluda%"))



**Database Preview:**

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