**Movie Info Database Create:**

CREATE DATABASE movie\_info;

**Director Table Create:**

CREATE TABLE director(

Person\_ID INT(7) NOT NULL,

Director\_Name VARCHAR(40) NOT NULL,

Birth\_Year INT(4) NOT NULL,

No\_Of\_Films INT(4),

No\_Of\_Awards INT(4),

PRIMARY KEY(Person\_ID)

);

**Data Insertion Director Table:**

INSERT INTO director VALUES

(1,'Zahir Raihan',1935,5,5),

(2,'Rajkumar Hirani',1962,5,9),

(3,'Saytajit Ray',1921,45,55),

(4,'Anjan Dutt',1953,23,17),

(5,'Rituparno Ghosh',1963,20,15),

(6,'Goutam Ghose',1950,12,8),

(7,'Aparna Sen',1945,12,7),

(8,'Kaushik Ganguly',1968,23,30);

**Actor Table Create:**

CREATE TABLE actor(

Person\_ID INT(7) NOT NULL,

Actor\_Name VARCHAR(40) NOT NULL,

Birth\_Year INT(4) NOT NULL,

No\_Of\_Films INT(4),

No\_Of\_Awards INT(4),

PRIMARY KEY(Person\_ID)

);

**Data Insertion Actor Table:**

INSERT INTO actor VALUES

(11,'Uttam Kumar',1926,190,150),

(12,'Razzak',1942,120,100),

(7,'Aparna Sen',1945,73,43),

(6,'Goutam Ghose',1950,3,1),

(8,'Kaushik Ganguly',1968,22,7),

(10,'Soumitra Chatterjee',1935,250,220),

(4,'Anjan Dutt',1953,39,10);

**Movie Table Create:**

CREATE TABLE movie(

Movie\_ID INT(7),

Movie\_Name VARCHAR(40),

Genre VARCHAR(20),

Year INT(4),

IMDB\_Rating NUMERIC(4,2),

Person\_ID INT(7),

PRIMARY KEY(Movie\_ID),

FOREIGN KEY (Person\_ID) REFERENCES director(Person\_ID)

);

**Data Insertion Movie Table:**

INSERT INTO movie VALUES

(1,'Pather Panchali','Drama',1955,8.5,3),

(2,'Noukadubi','Drama',2011,7.6,5),

(3,'Abohomaan','Drama',2009,7.3,5),

(4,'Joi Baba Felunath','Thriller',1979,8.0,3),

(5,'Jibon Theke Neya','Drama',1970,9.4,1),

(6,'Moner Manush','Biography',2010,8.0,6),

(7,'Apur Panchali','Biography',2013,8.2,8),

(8,'Goynar Baksho','Comedy',2013,7.1,7),

(9,'Byomkesh O Agnibaan','Thriller',2017,7.4,4),

(10,'Byomkesh Bakshi','Thriller',2010,7.4,4),

(11,'PK','Fiction',2014,8.2,2);

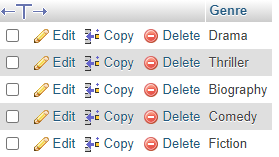
**Query 1.1: Find the name, genre, and IMDB rating of all the movies**

**SELECT Movie\_Name,Genre,IMDB\_Rating from movie;**

****

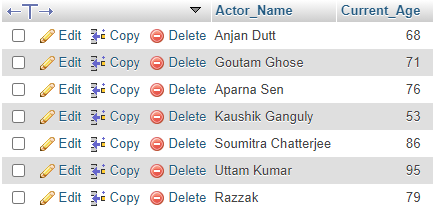
**Query 1.2: Display all the distinct movie-genres.**

**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.**

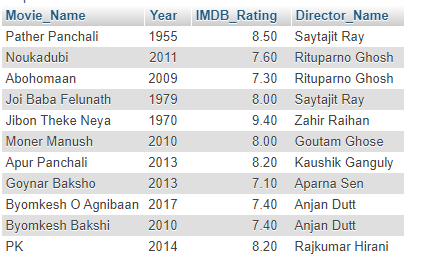
**SELECT Movie\_Name FROM movie WHERE (Genre='Thriller' AND IMDB\_Rating>=8.0)**

****

**Query 1.5: Find the name, release year, IMDB rating, and the name of the director of all the movies**

**SELECT Movie\_Name,Year,IMDB\_Rating,director.Director\_Name FROM movie**

**INNER JOIN director on movie.Person\_ID=director.Person\_ID;**

****

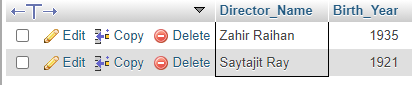
**Query 1.6: Find the name and number of awards of those directors whose name starts with an ‘S’**

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

****

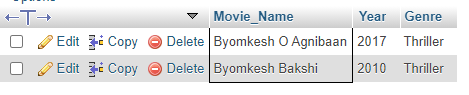
**Query 1.7: Find the name and birth year of those directors whose name contains an ‘a’ as its 2nd last character.**

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

****

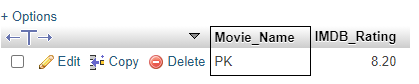
**Query 1.8: Find the name, release year, and genre of all the movies which contain the word ‘Byomkesh’ anywhere in their name**

**SELECT Movie\_Name,Year,Genre from movie WHERE Movie\_Name LIKE '%byomkesh%';**

****

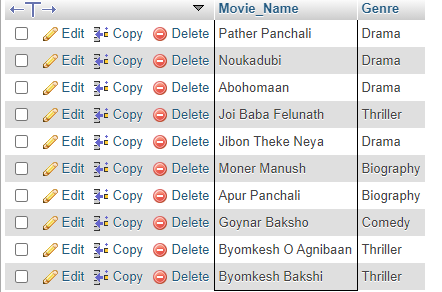
**Query 1.9: Find the name and IMDB rating of all the movies whose name consists of only 2 characters.**

**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 Movie\_Name LIKE '\_\_\_\_%';**

****

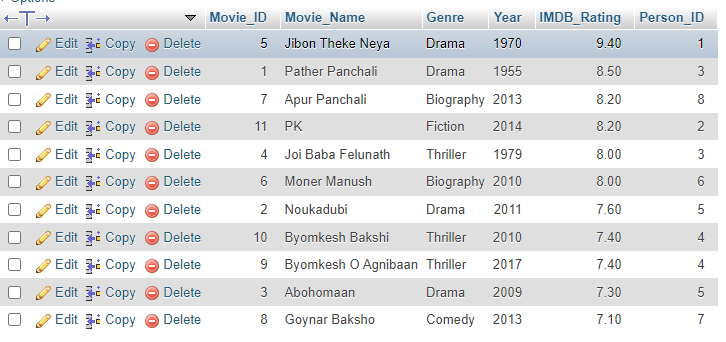
**Query 2.1: Find the name and IMDB rating of all the movies which contain either 1 or, 2 or, 3 or, 4 characters in their name.**

**SELECT Movie\_Name,IMDB\_Rating from movie WHERE 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 GROUP BY IMDB\_Rating Desc,Movie\_Name;**

****

**Query 2.3: Find the average IMDB rating of all the movies of the drama genre.**

**SELECT Genre,AVG(IMDB\_Rating) AS Average\_IMDB\_Rating FROM movie WHERE Genre='drama' GROUP BY Genre**

****

**Query 2.4: Find the total number of movies in the database.**

**SELECT COUNT(Movie\_Name) AS Total\_Movies from movie;**

****

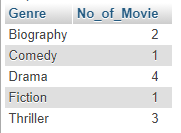
**Query 2.5: Find how many movie-genres are there in the database.**

**SELECT COUNT(DISTINCT Genre) AS No\_of\_Movie\_Genre FROM movie**

****

**Query 2.6: Find the total number of movies in each genre.**

**SELECT Genre,COUNT(Movie\_Name) AS No\_of\_Movie from movie GROUP BY Genre;**

****

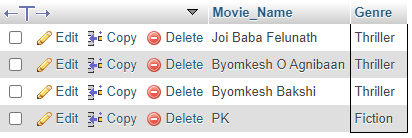
**Query 2.7: Find all the movies of action, thriller/fiction genre.**

**1.**

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

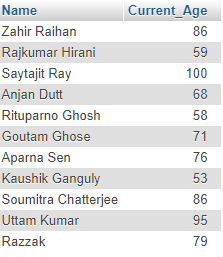
**2.**

**SELECT Movie\_Name,Genre from movie WHERE Genre IN ('Action', 'Thriller','Fiction')**

****

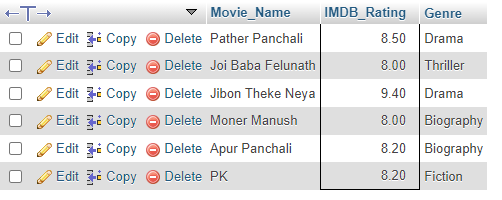
**Query 2.8: Find the Name and current age of all the directors and actors.**

**(SELECT Director\_Name AS Name,2021-Birth\_Year AS Current\_Age FROM director) UNION (SELECT Actor\_Name AS Name,2021-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.**

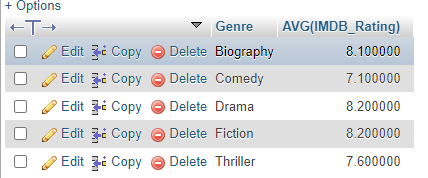
**SELECT Movie\_Name, IMDB\_Rating, Genre from movie WHERE IMDB\_Rating >=8.0**

****

**Query 3.2 : Display all the distinct movie-genres and the average IMDb**

**rating of each movie-genre.**

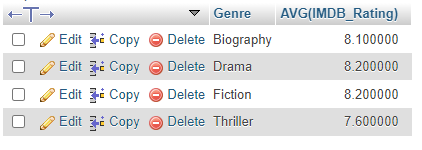
**SELECT Genre , AVG(IMDB\_Rating) FROM movie GROUP BY Genre**

****

**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.**

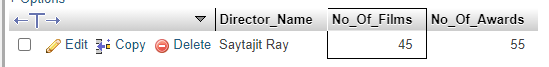
**SELECT Genre , AVG(IMDB\_Rating) FROM movie GROUP BY GENRE HAVING AVG(IMDB\_Rating)>=7.5 ;**

****

**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 WHERE No\_Of\_Films = (SELECT MAX(No\_Of\_Films) FROM director)**

****

**Query 3.5 : Find the name, current age, number of films and number of**

**awards of the youngest actor.**

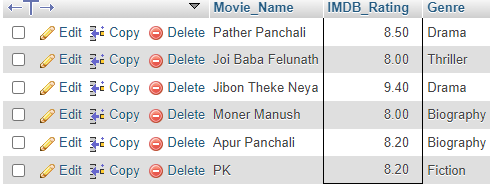
**SELECT Actor\_Name, 2021-Birth\_Year as Current\_Age , No\_Of\_Films, No\_Of\_Awards from actor where Birth\_Year= (SELECT MAX(Birth\_Year) from actor)**

****

**Query 3.6 : Find the name, IMDb rating and genre of those movies whose**

**IMDb Rating is above average.**

**SELECT Movie\_Name, IMDB\_Rating, 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.**

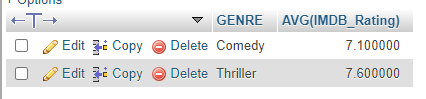
**SELECT GENRE,AVG(IMDB\_Rating) FROM MOVIE GROUP BY GENRE**

**HAVING AVG(IMDB\_Rating)<**

**(SELECT AVG(AVG\_IMDB) AS AVERAGE**

**FROM**

**(SELECT AVG(IMDB\_Rating) as AVG\_IMDB from movie GROUP BY Genre) AS GENRE\_IMDB)**

****

**Query 3.8 : Among all the movie genres, find the highest average IMDb rating.**

**(SELECT MAX(AVG\_IMDB) AS MAX\_AVG\_IMDB FROM**

**(SELECT AVG(IMDB\_Rating) AS AVG\_IMDB FROM movie GROUP BY Genre) AS GENRE\_IMDB)**

****

**Movie\_Characters Table Create:**

CREATE TABLE movie\_characters(

Character\_ID INT(7) NOT NULL,

Character\_Name VARCHAR(40) NOT NULL,

Age INT(3),

PRIMARY KEY(Character\_ID)

**);**

**Data Insertion Movie\_Characters Table**

INSERT INTO movie\_characters VALUES

(1, 'Apu', 7),

(2, 'Durga',10),

(3, 'Harihar', 42),

(4, 'Sarbajaya', 35),

(5, 'Ramesh', 28),

(6, 'Hemnalini', 25),

(7, 'Nalinaksha', 30),

(8, 'Kamala', 20),

(9, 'Shikha', 21),

(10, 'Apratim', 26),

(11, 'Feluda', 25),

(12, 'Maganlal Meghraj', 35),

(13, 'Jatayu', 45),

(14, 'Topshe', 18),

(15, 'Ruku', 6),

(16, 'Faruk', 22),

(17, 'Bithi', 19),

(18, 'Sathi', 24),

(19, 'Lalon', null),

(20, 'Kaluah', 25),

(21, 'Siraj Saain', 45),

(22, 'Komli', 25),

(23, 'Subir Banerjee', null),

(24, 'Ashima', 24),

(25, 'Rashmoni', null),

(26, 'Somalata', 24),

(27, 'Chaitali', 18),

(28, 'Byomkesh Bakshi', 26),

(29, 'Ajit', 27),

(30, 'Malati', 16),

(31, 'Debkumar', 50),

(32, 'Doctor Anukul', 45),

(33, 'Prabhat', 27),

(34, 'Satyabati', 22),

(35, 'Anadi Babu', 55),

(36, 'PK', null),

(37, 'Jaggu', 26),

(38, 'Sarfaraz', 29),

(39, 'Tapasvi Maharaj', 50)

**Movie\_Characters\_Relationship Table Create:**

CREATE TABLE movie\_characters\_relationship

(

Character\_ID INT(7) NOT NULL,

Movie\_ID INT(7),

FOREIGN KEY (Character\_ID) REFERENCES movie\_characters(Character\_ID),

FOREIGN KEY (Movie\_ID) REFERENCES movie(Movie\_ID)

);

**Data Insertion Movie\_Characters\_Relationship Table :**

INSERT INTO `movie\_characters\_relationship` VALUES

(1, 1),

(2, 1),

(3, 1),

(4, 1),

(5, 2),

(6, 2),

(7, 2),

(8, 2),

(9, 3),

(10, 3),

(11, 4),

(12, 4),

(13, 4),

(14, 4),

(15, 4),

(16, 5),

(17, 5),

(18, 5),

(19, 6),

(20, 6),

(21, 6),

(22, 6),

(23, 7),

(24, 7),

(25, 8),

(26, 8),

(27, 8),

(28, 9),

(28, 10),

(29, 9),

(29, 10),

(30, 9),

(31, 9),

(32, 9),

(33, 10),

(34, 9),

(34, 10),

(35, 10),

(36, 11),

(37, 11),

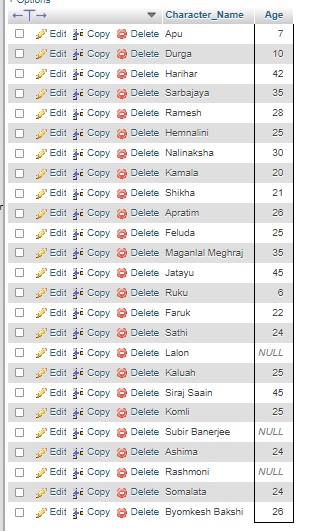
(38, 11),

(39, 11);

**Query 4.1 : Find the name and age of all the movie characters who are not teenagers.**

**SELECT Character\_Name,Age FROM movie\_characters**

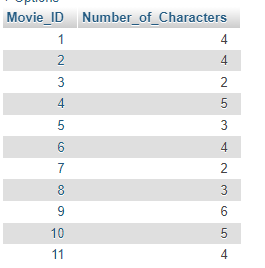
**WHERE Age NOT BETWEEN 13 AND 19 OR AGE IS NULL**

****

**Query 4.2 : Find the movie ID of all the movies and the number of**

**movie-characters in each movie.**

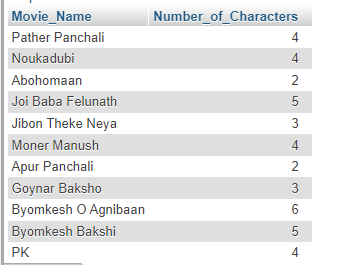
**SELECT Movie\_ID,COUNT(Character\_ID) AS Number\_of\_Characters FROM movie\_characters\_relationship GROUP BY Movie\_ID;**

****

**Query 4.3 : Find the movie name of all the movies and the number of**

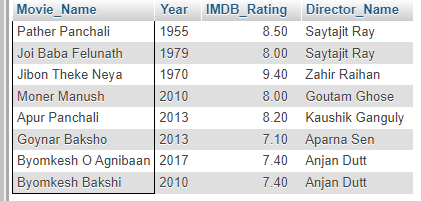
**movie-characters in each movie.**

**SELECT Movie\_Name, COUNT(Character\_ID) AS Number\_of\_Characters FROM movie JOIN movie\_characters\_relationship USING(Movie\_ID) GROUP BY Movie\_ID**

****

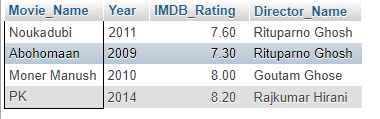
**Query 4.4: Find the name, year of release, IMDB rating and the name of the director of all the movies that contain at least 12 characters (including spaces) in their name.**

**SELECT Movie\_Name, Year, IMDB\_Rating, Director\_Name FROM movie JOIN director USING(Person\_ID) WHERE LENGTH(Movie\_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 JOIN director USING(Person\_ID) WHERE LENGTH(Movie\_Name) <= 12**

****

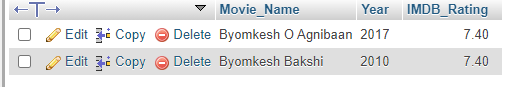
**Query 4.6: Find the name, year of release, IMDB rating of all the movies of Byomkesh (N.B.: A movie of Byomkesh may not contain the term ‘Byomkesh’ in its name).**

**SELECT Movie\_Name, Year, IMDB\_Rating FROM movie**

**WHERE Movie\_ID IN**

**(SELECT Movie\_ID FROM movie\_characters\_relationship JOIN movie\_characters USING(Character\_ID)**

**WHERE Character\_Name = 'Byomkesh Bakshi')**

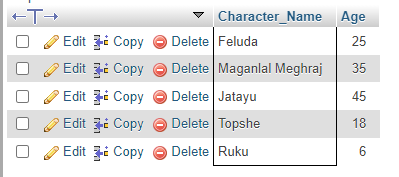
****

**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, Age FROM movie\_characters WHERE Character\_ID IN**

**(SELECT Character\_ID FROM movie\_characters\_relationship WHERE Movie\_ID IN**

**(SELECT Movie\_ID FROM movie\_characters\_relationship JOIN movie\_characters USING(Character\_ID) WHERE Character\_Name='Feluda'))**

****