Database Management System Lab

Task 1: Create table movie, actor and director according to the Movie_info Database information.

Code:

```sql
2 •  CREATE TABLE
3        Movie(
4            Movie_ID INT,
5            Movie_Name VARCHAR(255),
6            Genre VARCHAR(255),
7            Year INT,
8            IMDB_Rating FLOAT,
9            Director_ID INT,
10           PRIMARY KEY (Movie_ID),
11           FOREIGN KEY (Director_ID) REFERENCES Director(Person_ID)
12       );
13 •     insert into Movie
14    values
15            (1,"Pather Panchali","Drama",1995,8.5,3),
16            (2,"Noukadubi","Drama",2011,7.6,5),
17            (3,"Abohomaan","Drama",2009,7.3,5),
18 ⊠        (4,"Joi Baba Felunath","Thriller",1979,8.ʌ,3),
19            (5 ,"Jibon Theke Neya","Drama",1970,9.4,1),
20            (6 ,"Moner Manush","Bioghaphy",2010,8.0,6),
21            (7 ,"Apur Panchali","Bioghaphy",2013,8.2,8),
22            (8 ,"Goynar Baksho","Comedy",2013,7.1,7),
23            (9 ,"Byomkesh O Agnibaan","Thriller",2017,7.4,4),
24            (10 ,"Byomkesh Bakshi","Thriller",2010,7.4,4),
25            (11,"PK","Fiction",2014,8.2,2);
26 •  select * from Movie;
```

```sql
1 •  use movie_info;
2 •  CREATE TABLE Actor (
3        Person_ID INT,
4        Actor_Name VARCHAR(255),
5        Birth_Year INT,
6        No_Of_Films INT,
7        No_Of_Awards INT,
8        PRIMARY KEY (Person_ID)
9    );
10
11 •  insert into Actor(Person_ID, Actor_Name, Birth_Year, No_Of_Films, No_Of_Awards)
12    values (11, "Uttam Kumar", 1926, 190, 150),
13            (12, "Razzak", 1942, 120, 100),
14            (7, "Aparna Sen", 1945, 73, 43),
15            (6, "Goutam Ghose", 1950, 3, 1),
16            (8, "Kaushik Ganguly", 1968, 22, 7),
17            (10, "Soumitra Chatterjee", 1935, 250, 220),
18            (4, "Anjan Dutt", 1953, 39, 10);
19
20 •  SELECT * FROM Actor;
```

```sql
USE Movie_Info;

CREATE TABLE Director (
    Person_ID INT,
    Director_Name VARCHAR(255),
    Birth_Year INT,
    No_Of_Films INT,
    No_Of_Awards INT,
    PRIMARY KEY (Person_ID)
);

INSERT INTO Director (Person_ID, Director_Name, Birth_Year, No_Of_Films, No_Of_Awards)
    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);

SELECT * FROM Director;
```

Output:
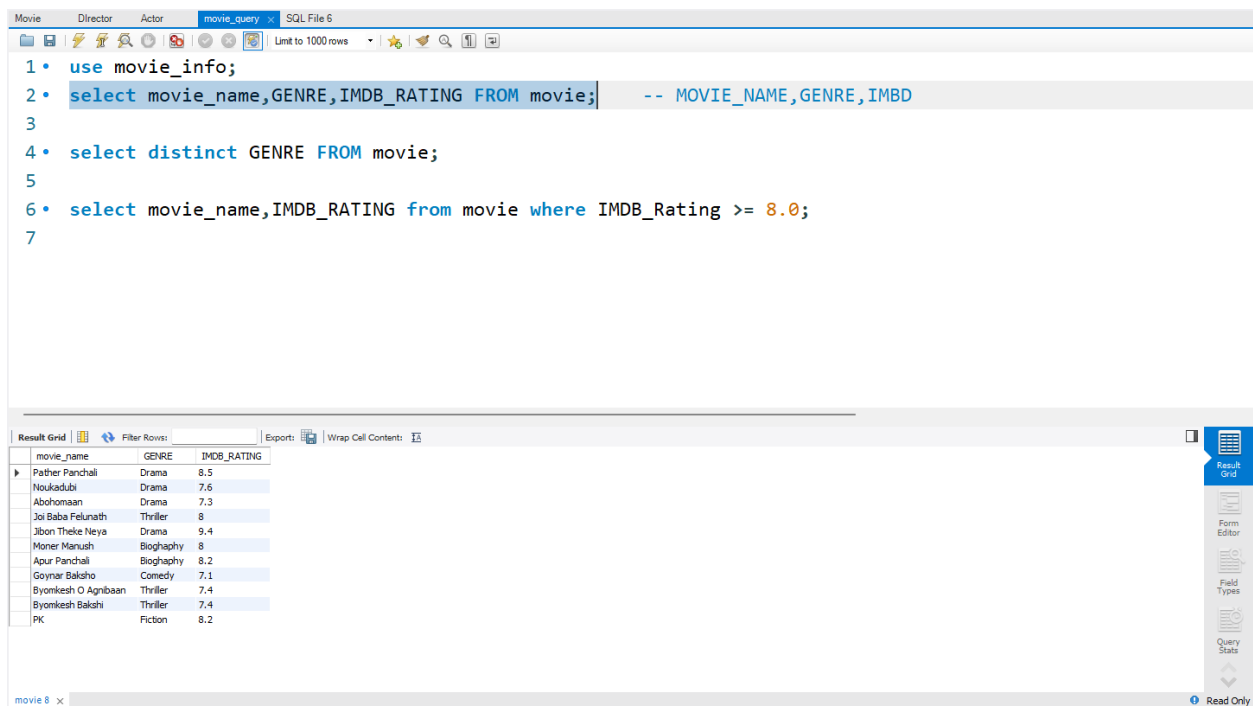
Movie_ID	Movie_Name	Genre	Year	IMDB_Rating	Director_ID
1	Pather Panchali	Drama	1995	8.5	3
2	Noukadubi	Drama	2011	7.6	5
3	Abohomaan	Drama	2009	7.3	5
4	Joi Baba Felunath	Thriller	1979	8	3
5	Jibon Theke Neya	Drama	1970	9.4	1
6	Moner Manush	Bioghaphy	2010	8	6
7	Apur Panchali	Bioghaphy	2013	8.2	8
8	Goynar 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
NULL	NULL	NULL	NULL	NULL	NULL

Person_ID	Actor_Name	Birth_Year	No_Of_Films	No_Of_Awards
4	Anjan Dutt	1953	39	10
6	Goutam Ghose	1950	3	1
7	Aparna Sen	1945	73	43
8	Kaushik Ganguly	1968	22	7
10	Soumitra Chatterjee	1935	250	220
11	Uttam Kumar	1926	190	150
12	Razzak	1942	120	100
NULL	NULL	NULL	NULL	NULL

Person_ID	Director_Name	Birth_Year	No_Of_Films	No_Of_Awards
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
NULL	NULL	NULL	NULL	NULL

Task 2: Find the name, genre and IMDB rating of all the movies.

Code:

```
1 •  use movie_info;
2 •  select movie_name,GENRE,IMDB_RATING FROM movie;      -- MOVIE_NAME,GENRE,IMBD
3
4 •  select distinct GENRE FROM movie;
5
6 •  select movie_name,IMDB_RATING from movie where IMDB_Rating >= 8.0;
7
```
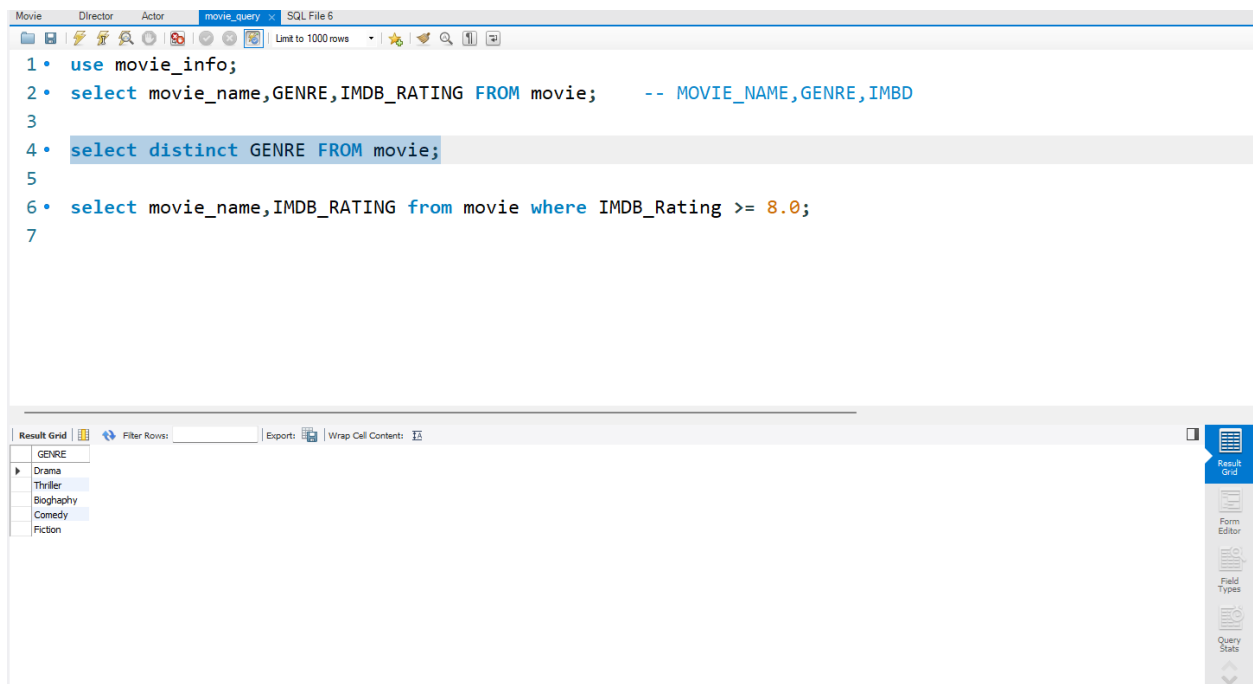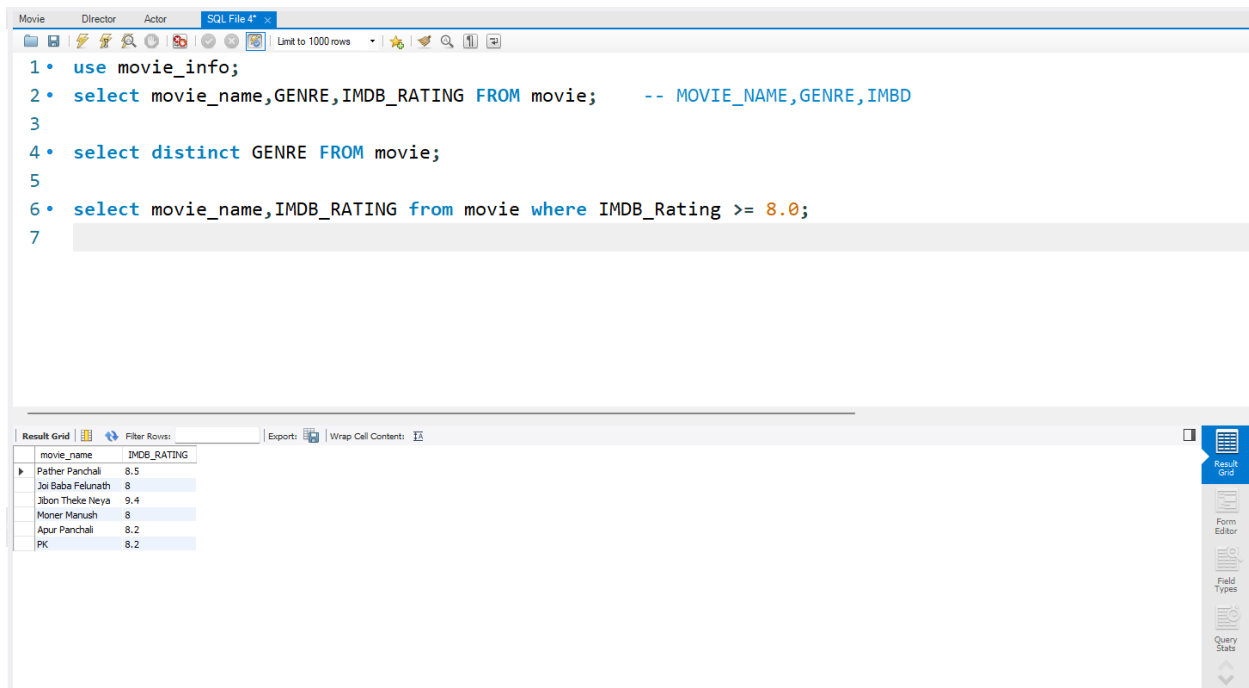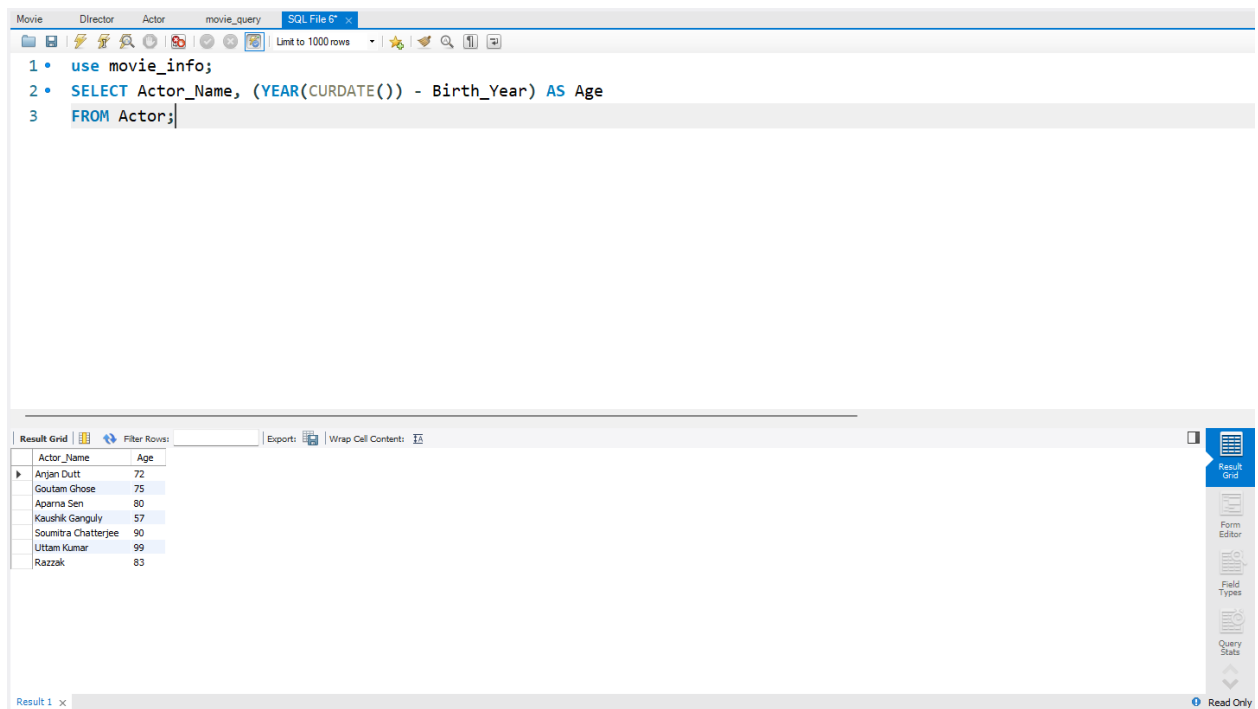
movie_name	GENRE	IMDB_RATING
Pather Panchali	Drama	8.5
Noukadubi	Drama	7.6
Abohomaan	Drama	7.3
Joi Baba Felunath	Thriller	8
Jibon Theke Neya	Drama	9.4
Moner Manush	Bioghaphy	8
Apur Panchali	Bioghaphy	8.2
Goynar Baksho	Comedy	7.1
Byomkesh O Agnibaan	Thriller	7.4
Byomkesh Bakshi	Thriller	7.4
PK	Fiction	8.2

Task 3: Find all the distinct movie genres.

Code:

Task 4: Find the name and IMDb rating of all the movies of drama genre whose IMDb rating is greater than or equal to 8.0.

Code:

Task 5: Find the name and current age of all the actors.

Code:


```sql
use movie_info;
SELECT Actor_Name, (YEAR(CURDATE()) - Birth_Year) AS Age
FROM Actor;
```
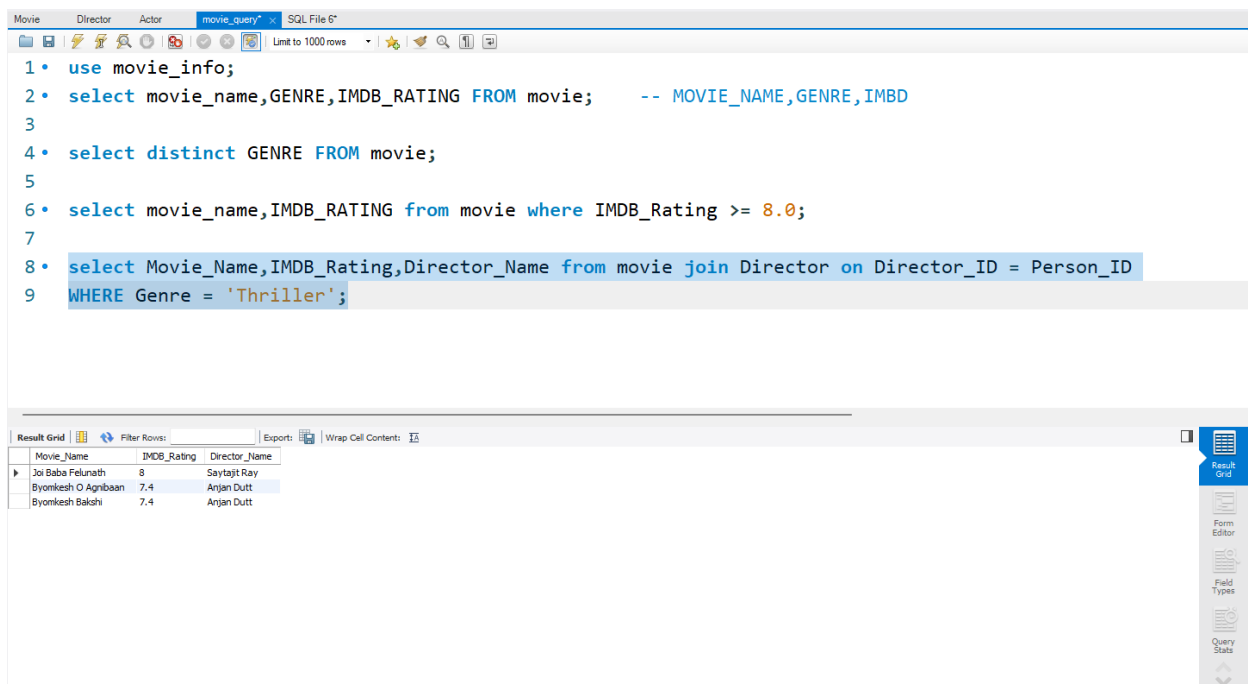
Actor_Name	Age
Anjan Dutt	72
Goutam Ghose	75
Aparna Sen	80
Kaushik Ganguly	57
Soumitra Chatterjee	90
Uttam Kumar	99
Razzak	83

Task 6: Find the Name, IMDb rating and the name of the director of all the movies of thriller genre.

Code:

```
1•  use movie_info;
2•  select movie_name,GENRE,IMDB_RATING FROM movie;    -- MOVIE_NAME,GENRE,IMBD
3
4•  select distinct GENRE FROM movie;
5
6•  select movie_name,IMDB_RATING from movie where IMDB_Rating >= 8.0;
7
8•  select Movie_Name,IMDB_Rating,Director_Name from movie join Director on Director_ID = Person_ID
9   WHERE Genre = 'Thriller';
```
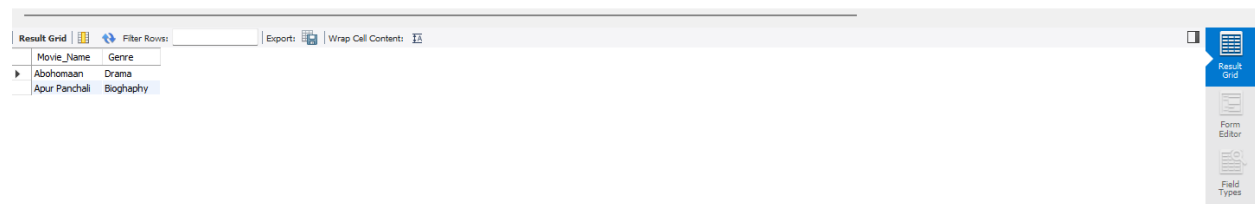
Movie_Name	IMDB_Rating	Director_Name
Joi Baba Felunath	8	Saytajit Ray
Byomkesh O Agnibaan	7.4	Anjan Dutt
Byomkesh Bakshi	7.4	Anjan Dutt

Task 7: Find the name and genre of the movies whose name starts with an 'A'.

Code:

```
10
11•  select Movie_Name,Genre from movie where Movie_Name like 'A%';
```
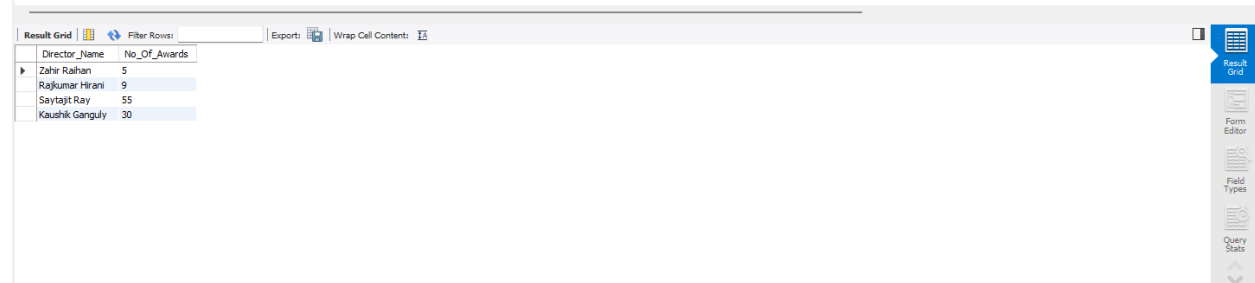
Movie_Name	Genre
Abohomaan	Drama
Apur Panchali	Bioghaphy

Task 8: Find the name and the number of awards of those directors whose name contains an 'a' as its second character.

Code:

```
1•  use movie_info;
2•  select Director_Name,No_Of_Awards from Director where Director_Name like '_a%';
```

Director_Name	No_Of_Awards
Zahir Raihan	5
Rajkumar Hirani	9
Saytajit Ray	55
Kaushik Ganguly	30

Task 9: Find the name and director name of all the
movies that contain the term 'Byomkesh' into their
name.

Code:

```
12
13 •  select Movie_Name from movie join Director on Director_ID = Person_ID where Movie_Name like "%Byomkesh%";
```
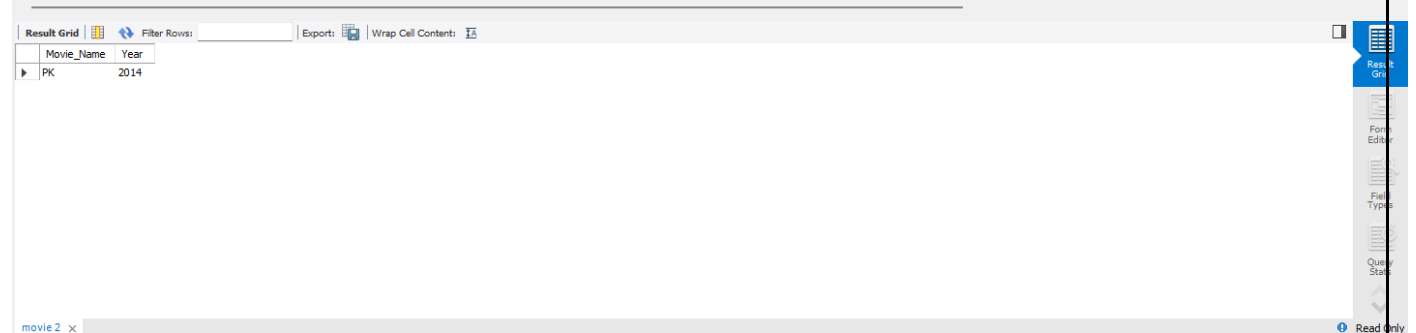
Movie_Name
Byomkesh O Agnibaan
Byomkesh Bakshi

Task 10: Find the name and release year of all the
movies that contain only 2 characters in their name.

Code:

```
14
15 •  select Movie_Name,Year from movie where length(movie_name) = 2;
```

Movie_Name	Year
PK	2014

Task 11: Find the name and the genre of all the movies that contain atleast 5 characters in their name.

Code:

```
16
17 •  select Movie_Name,Genre from movie where length(movie_name) >= 5;
```
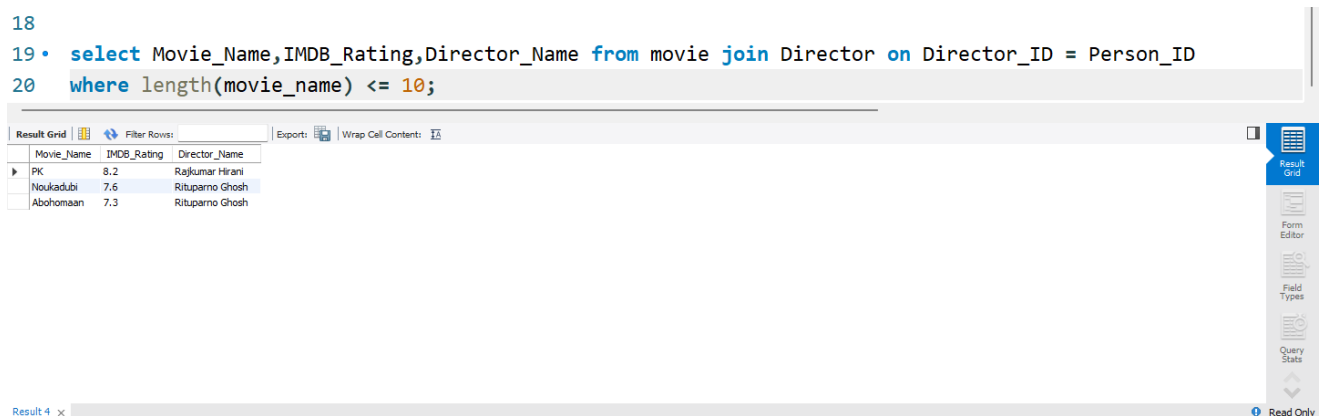
Movie_Name	Genre
Pather Panchali	Drama
Noukadubi	Drama
Abohomaan	Drama
Joi Baba Felunath	Thriller
Jibon Theke Neya	Drama
Moner Manush	Bioghaphy
Apur Panchali	Bioghaphy
Goynar Baksho	Comedy
Byomkesh O Agnibaan	Thriller
Byomkesh Bakshi	Thriller

Task 12: Find the name, Imdb rating and the name of the director of all movies that contain at most 10 characters in their name.

Code:

```
18
19 •  select Movie_Name,IMDB_Rating,Director_Name from movie join Director on Director_ID = Person_ID
20     where length(movie_name) <= 10;
```

Movie_Name	IMDB_Rating	Director_Name
PK	8.2	Rajkumar Hirani
Noukadubi	7.6	Rituparno Ghosh
Abohomaan	7.3	Rituparno Ghosh