

Database Management System Lab

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

Code:

```
Query 1: SQL File 2"
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",1979,8.3,3),
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 Agnibaaan","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;

Query 1: SQL File 2" SQL File 3"
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;
```

Query 1

SQL File 2

Limit to 1000 rows

SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 • USE Movie_Info;
2
3 • CREATE TABLE Director (
4     Person_ID INT,
5     Director_Name VARCHAR(255),
6     Birth_Year INT,
7     No_Of_Films INT,
8     No_Of_Awards INT,
9     PRIMARY KEY (Person_ID)
10 );
11
12 • INSERT INTO Director (Person_ID, Director_Name, Birth_Year, No_Of_Films, No_Of_Awards)
13     VALUES
14     (1, "Zahir Raihan", 1935, 5, 5),
15     (2, "Rajkumar Hirani", 1962, 5, 9),
16     (3, "Saytajit Ray", 1921, 45, 55),
17     (4, "Anjan Dutt", 1953, 23, 17),
18     (5, "Rituparno Ghosh", 1963, 20, 15),
19     (6, "Goutam Ghose", 1950, 12, 8),
20     (7, "Aparna Sen", 1945, 12, 7),
21     (8, "Kaushik Ganguly", 1968, 23, 30);
22
23 • SELECT * FROM Director;
  
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	08:46:14	USE Movie_Info	0 row(s) affected	0.000 sec
2	08:46:14	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))	0 row(s) affected	0.016 sec
3	08:46:14	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);	8 row(s) affected Records: 8 Duplicates: 0 Warnings: 0	0.016 sec
4	08:46:14	SELECT * FROM Director LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

Output:

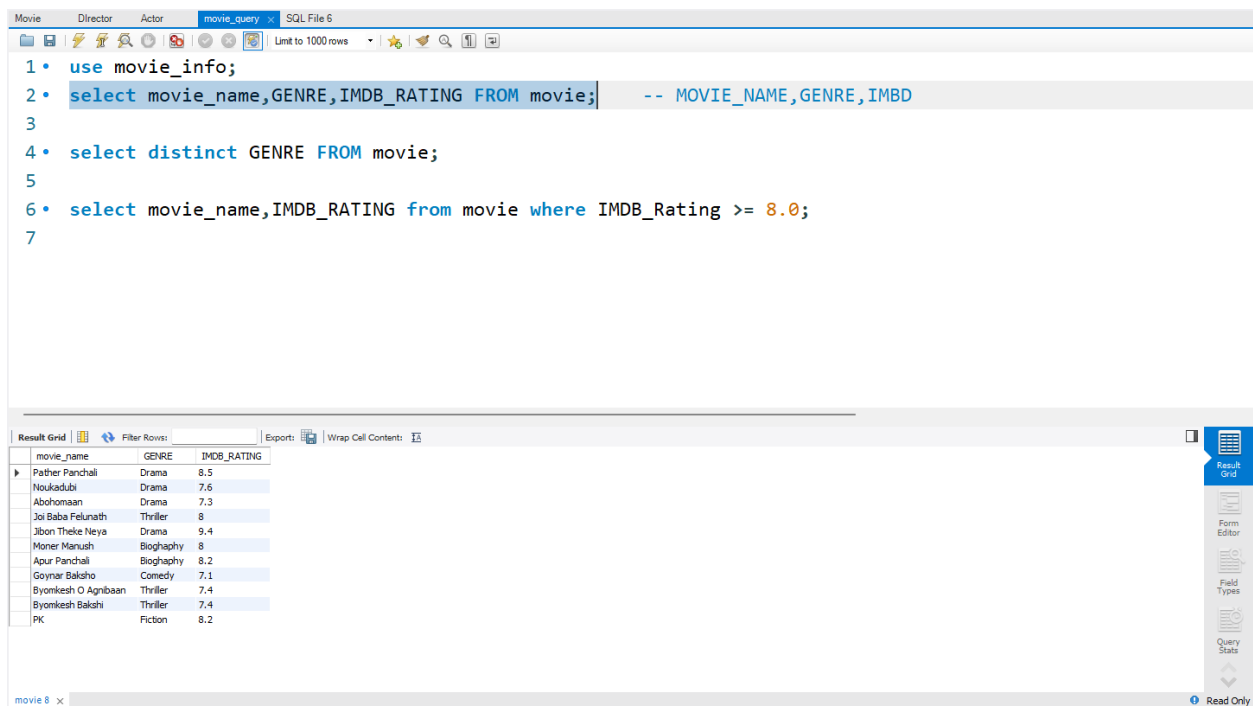
Movie_ID	Movie_Name	Genre	Year	IMDB_Rating	Director_ID
1	Pather Panchali	Drama	1995	8.5	3
2	Noukadubi	Drama	2011	7.6	5
3	Abohomaan	Drama	2009	7.3	5
4	Joi Baba Felunath	Thriller	1979	8	3
5	Jibon Theke Neya	Drama	1970	9.4	1
6	Moner Manush	Bioghaphy	2010	8	6
7	Apur Panchali	Bioghaphy	2013	8.2	8
8	Goynar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

Result Grid					
Filter Rows:		Edit:			
Export/Import:		Wrap Cell Content:			
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	

Result Grid					
Filter Rows:		Edit:			
Export/Import:		Wrap Cell Content:			
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	

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

Code:



The screenshot shows a SQL IDE interface with a query editor and a results grid. The query editor contains the following SQL 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
```

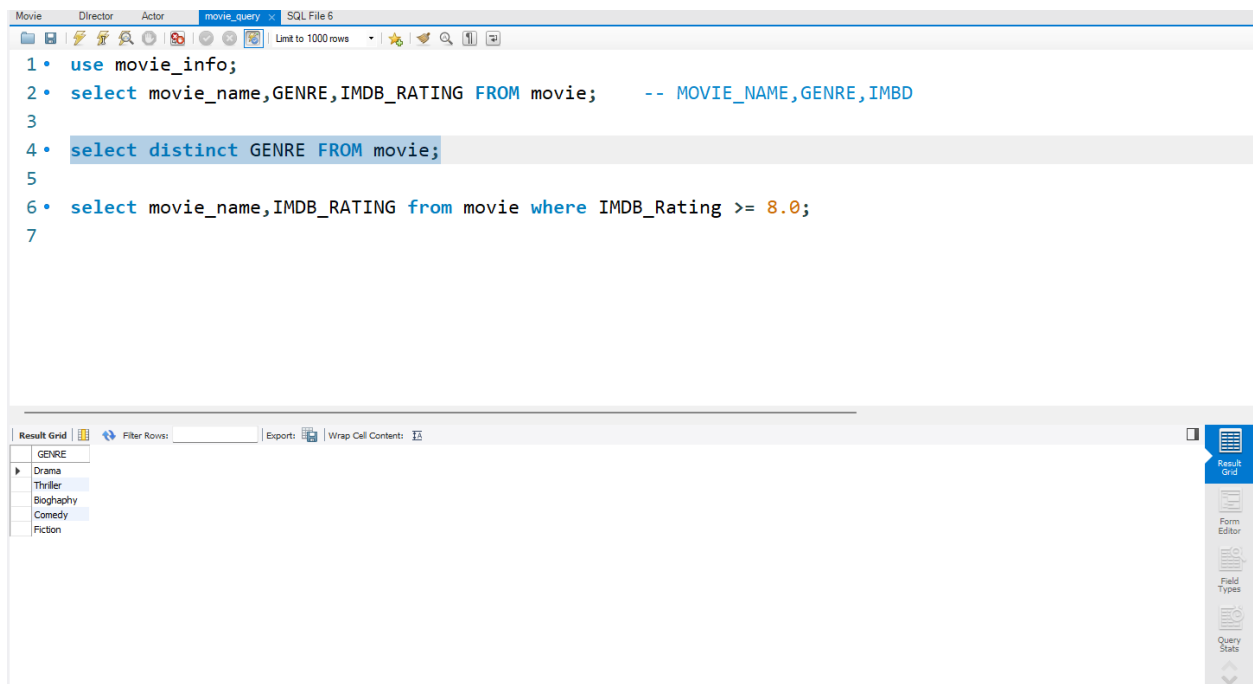
The results grid displays the following data:

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	Biography	8
Apur Panchali	Biography	8.2
Goynar Baksho	Comedy	7.1
Byomkesh O Agnibaan	Thriller	7.4
Byomkesh Bakshi	Thriller	7.4
PK	Fiction	8.2

The interface includes a toolbar at the top with icons for file operations, a 'Limit to 1000 rows' dropdown, and a 'Read Only' status indicator at the bottom right.

Task 3: Find all the distinct movie genres.

Code:



The screenshot shows a SQL IDE window with a tab labeled 'movie_query' and 'SQL File 6'. The query editor contains the following SQL 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
```

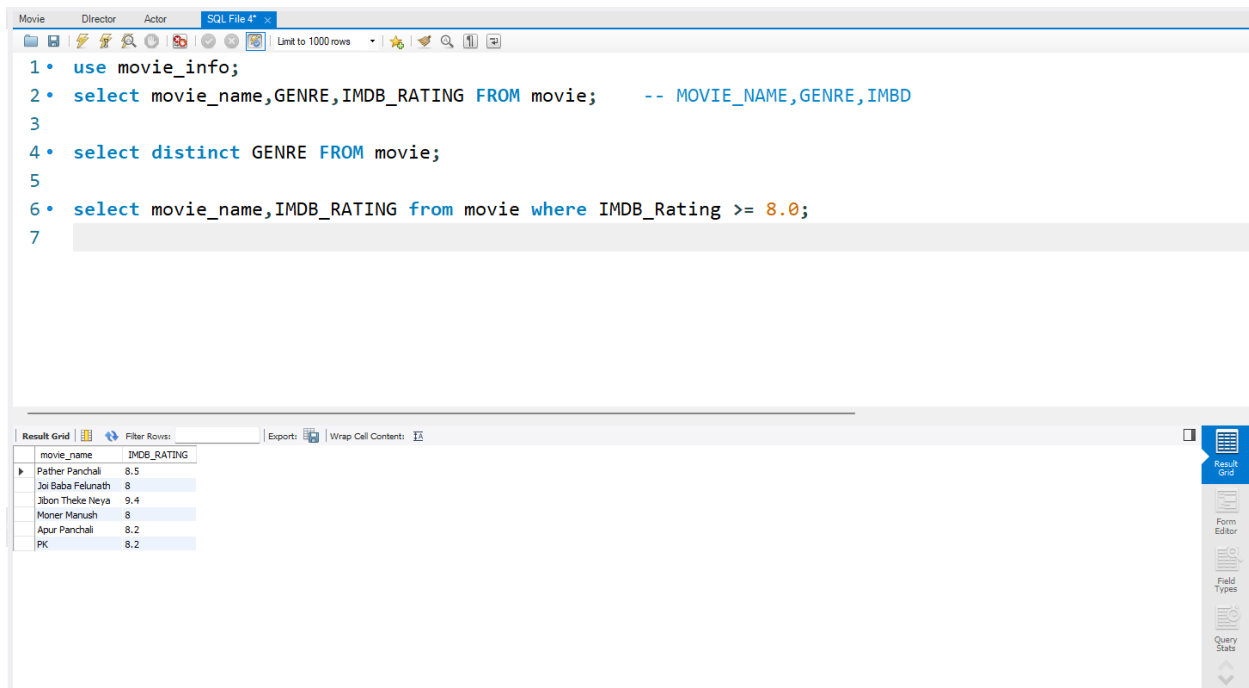
Below the query editor, the 'Result Grid' is visible, showing a table with the following data:

GENRE
Drama
Thriller
Biography
Comedy
Fiction

The right sidebar contains icons for 'Result Grid', 'Form Editor', 'Field Types', and 'Query State'.

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:



The screenshot shows a SQL IDE window titled "SQL File 4" with a query editor and a results grid. The query editor contains the following SQL 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
```

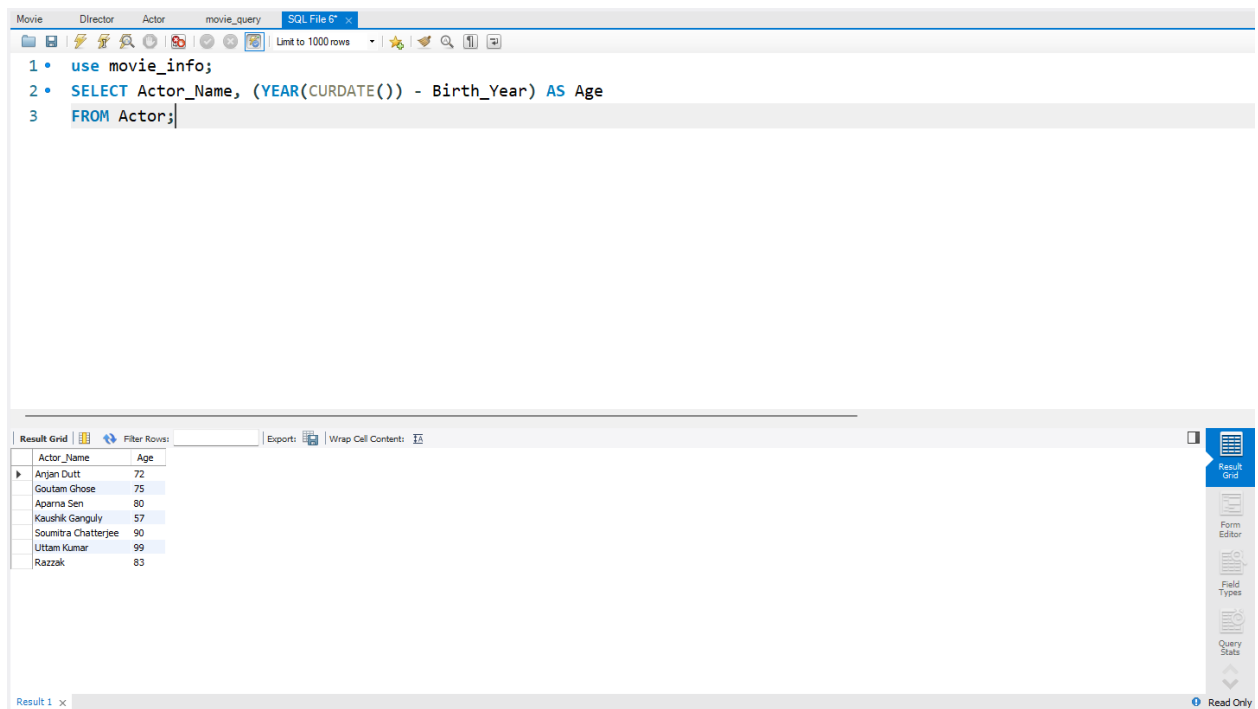
The results grid displays the following data:

movie_name	IMDB_RATING
Pather Panchali	8.5
Jai Baba Felunath	8
Jibon Theke Neya	9.4
Moner Manush	8
Apur Panchali	8.2
PK	8.2

The IDE interface includes a top toolbar with icons for file operations, a "Limit to 1000 rows" dropdown, and a "Result Grid" button on the right sidebar. The bottom of the window shows a "Result Grid" tab and a "Filter Rows" input field.

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

Code:



The screenshot shows a SQL IDE interface with a query editor and a results grid. The query editor contains the following SQL code:

```
1 • use movie_info;
2 • SELECT Actor_Name, (YEAR(CURDATE()) - Birth_Year) AS Age
3 • FROM Actor;
```

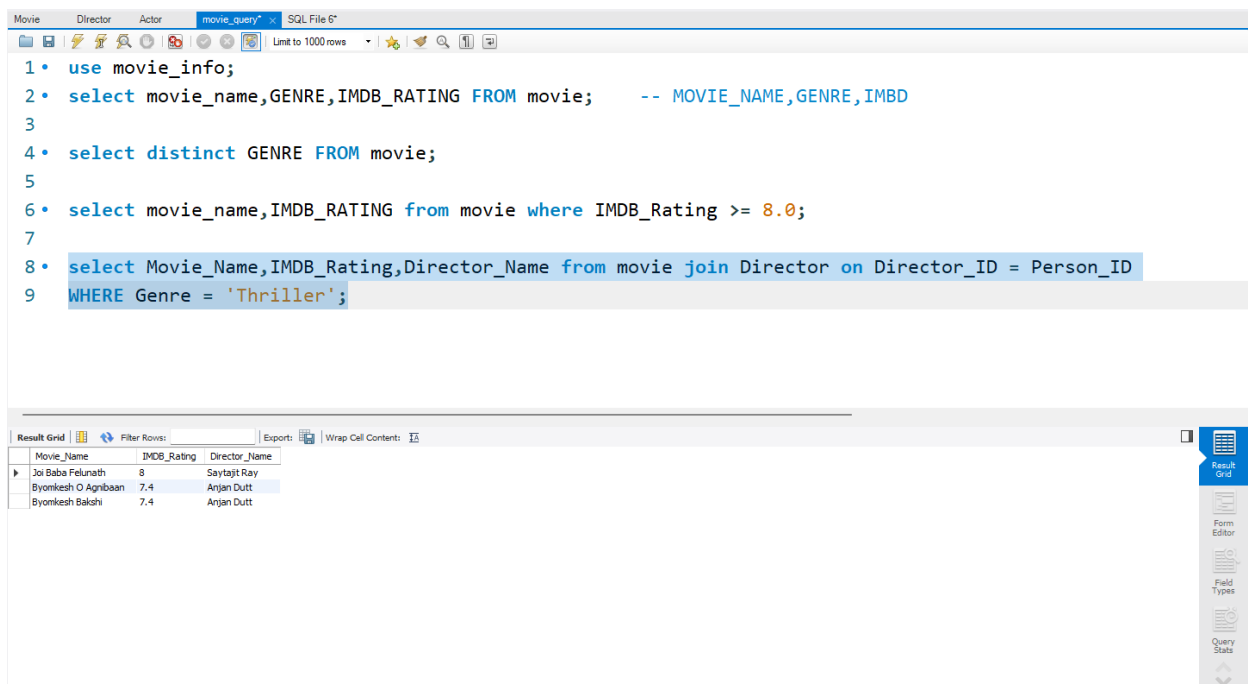
The results grid displays the following data:

Actor_Name	Age
Anjan Dutt	72
Goutam Ghose	75
Aparna Sen	80
Kaushik Ganguly	57
Soumitra Chatterjee	90
Uttam Kumar	99
Razzak	83

The interface also includes a toolbar with various icons, a 'Filter Rows' section, and a 'Result Grid' button on the right side. The status bar at the bottom indicates 'Result 1 x' and 'Read Only'.

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

Code:



The screenshot shows a SQL IDE window titled "movie_query" with a tab "SQL File 6". The query editor contains the following SQL 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';
```

Below the query editor, the "Result Grid" is displayed, showing the results of the query. The table has three columns: Movie_Name, IMDB_Rating, and Director_Name. The results are as follows:

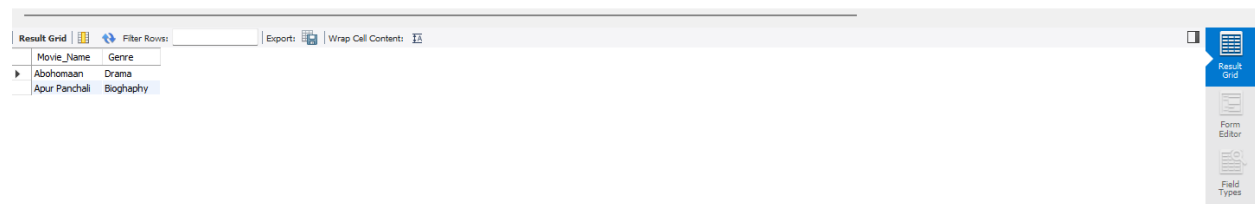
Movie_Name	IMDB_Rating	Director_Name
Joi Baba Felunath	8	Saytaji Ray
Byomkesh O Agnibaan	7.4	Anjan Dutt
Byomkesh Bakshi	7.4	Anjan Dutt

The IDE interface includes a toolbar at the top with icons for file operations, a "Limit to 1000 rows" dropdown, and a "Result Grid" button on the right. The bottom right corner features a vertical toolbar with icons for "Form Editor", "Field Types", and "Query Stats".

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%';
```



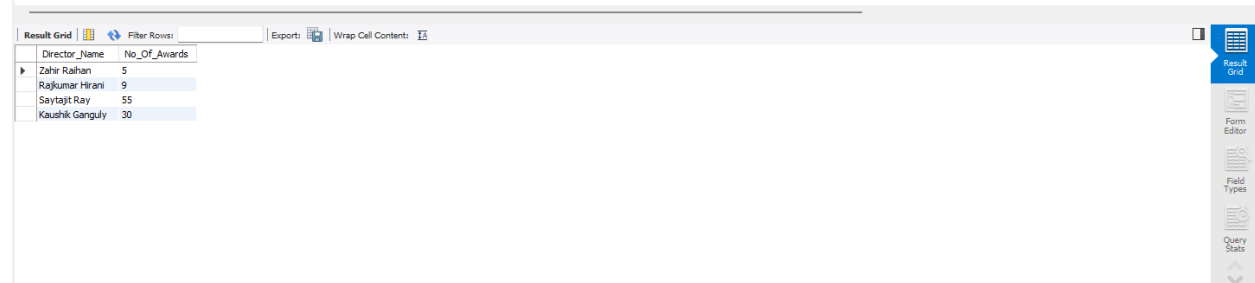
The screenshot shows a SQL IDE interface. At the top, there's a toolbar with icons for Result Grid, Filter Rows, and Export. Below the toolbar, the query results are displayed in a table with two columns: Movie_Name and Genre. The results show two rows: Abohomaan (Drama) and Apur Panchali (Biography). On the right side, there's a sidebar with icons for Result Grid, Form Editor, Field Types, and Query State.

Movie_Name	Genre
Abohomaan	Drama
Apur Panchali	Biography

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%';
```



The screenshot shows a SQL IDE interface. At the top, there's a toolbar with icons for Result Grid, Filter Rows, and Export. Below the toolbar, the query results are displayed in a table with two columns: Director_Name and No_Of_Awards. The results show four rows: Zahir Rahan (5), Rajkumar Hirani (9), Sayajit Ray (55), and Kaushik Ganguly (30). On the right side, there's a sidebar with icons for Result Grid, Form Editor, Field Types, and Query State.

Director_Name	No_Of_Awards
Zahir Rahan	5
Rajkumar Hirani	9
Sayajit 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%";
```



The screenshot shows a database query interface. The query is: `select Movie_Name from movie join Director on Director_ID = Person_ID where Movie_Name like "%Byomkesh%";`. The results are displayed in a table with the following data:

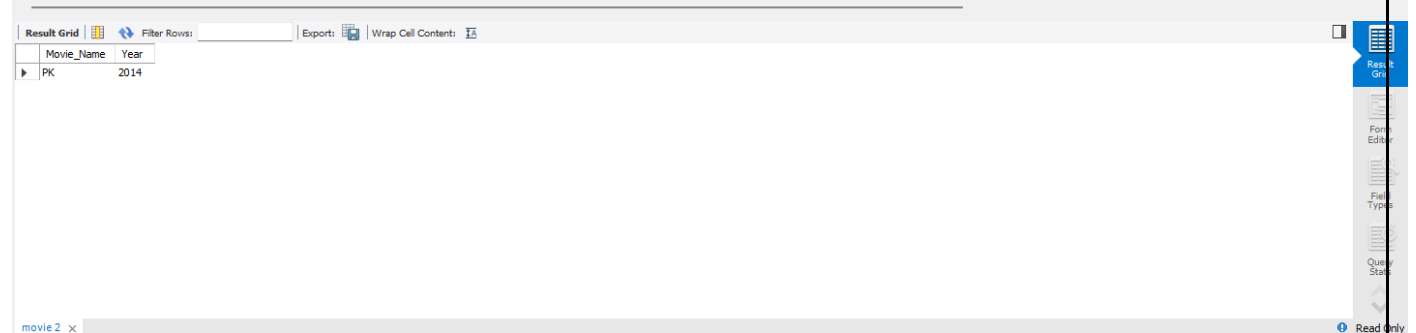
Movie_Name
Byomkesh O Agniwaan
Byomkesh Bakshi

The interface includes a 'Result Grid' tab, a 'Filter Rows' section, and an 'Export' button. The status bar at the bottom indicates 'Result 1' and 'Read Only'.

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;
```



The screenshot shows a database query interface. The query is: `select Movie_Name,Year from movie where length(movie_name) = 2;`. The results are displayed in a table with the following data:

Movie_Name	Year
PK	2014

The interface includes a 'Result Grid' tab, a 'Filter Rows' section, and an 'Export' button. The status bar at the bottom indicates 'movie 2' and 'Read Only'.

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;
```

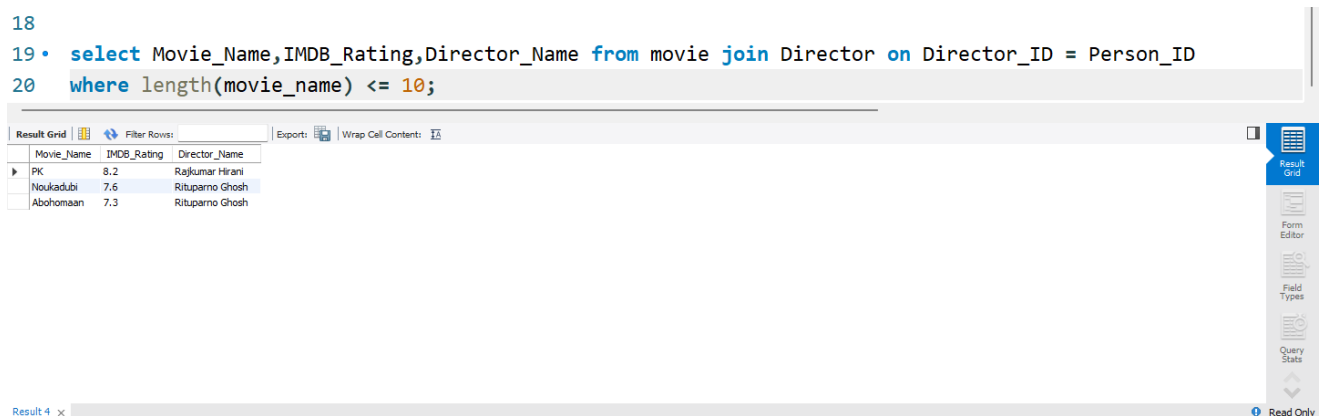


Movie_Name	Genre
Pather Panchali	Drama
Noukadubi	Drama
Abohomaan	Drama
Joi Baba Felunath	Thriller
Jhon Thelie Neyia	Drama
Moner Manush	Biography
Apur Panchali	Biography
Goynar Baksho	Comedy
Byomkesh O Agnihaan	Thriller
Byomkesh Bakshi	Thriller

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