IMDB

Abstract:

The Internet Movie Database (IMDb) is an online database containing information and statistics about movies, TV shows and video games as well as actors, directors and other film industry professionals.

Objective:

Help users to find interesting movies easier

·Allow the user to search movies by typing in the key word of the movie

·Allow the user to search movies by typing in the name of director

·Allow the user to search movies by typing in the name of an actor.

·Allow the user to search movies by typing in the movie's name

Help inform the user about popular movies

·Show the rating for each movie.

STRUCTURE OF TABLES

ACTORS:

This table contains the name of actor's .

```
mysql> desc actors;
+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| id       | int          | NO   |     | NULL    |       |
| name     | varchar(200) | YES  |     | NULL    |       |
| movie_id | int          | YES  | MUL | NULL    |       |
+----------+--------------+------+-----+---------+-------+
```

DIRECTORS:

This table contains the name of directors.

```
mysql> desc directors;
+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| id       | int          | NO   |     | NULL    |       |
| name     | varchar(200) | YES  |     | NULL    |       |
| movie_id | int          | YES  | MUL | NULL    |       |
+----------+--------------+------+-----+---------+-------+
```

MOVIES:

This table contains details about the movie name, which year it was released and the rating that the movie got.

```
mysql> desc movies;
+--------+--------------+------+-----+---------+----------------+
| Field  | Type         | Null | Key | Default | Extra          |
+--------+--------------+------+-----+---------+----------------+
| id     | int          | NO   | PRI | NULL    | auto_increment |
| name   | varchar(200) | YES  |     | NULL    |                |
| year   | int          | YES  |     | NULL    |                |
| rating | float        | YES  |     | NULL    |                |
+--------+--------------+------+-----+---------+----------------+
```

GENRES:

This table contains details about the genres of movie.

```
mysql> desc genres;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| movie_id    | int          | NO   | MUL | NULL    |       |
| Movie_genre | varchar(200) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
```

CONTENTS OF TABLES

ACTORS:

```
mysql> select* from actors;
+-----+--------------------+----------+
| id  | name               | movie_id |
+-----+--------------------+----------+
|   1 | Tim Robbins        |        1 |
|   2 | Morgan Freeman     |        1 |
|   3 | Al Pacino          |        2 |
|   4 | Heath Ledger       |        3 |
|   3 | Al Pacino          |        4 |
|   5 | Lee J. Cobb        |        5 |
|   6 | Liam Neeson        |        6 |
|   7 | Elijah Wood        |        7 |
|   8 | John Travolta      |        8 |
|   7 | Elijah Wood        |        9 |
|   9 | Clint Eastwood     |       10 |
|  10 | Tom Hanks          |       11 |
|  11 | Brad Pitt          |       12 |
|   7 | Elijah Wood        |       13 |
|  12 | Leonardo DiCaprio  |       14 |
|  16 | Mark Hamill        |       15 |
|  14 | Keanu Reeves       |       16 |
|  15 | Robert De Niro     |       17 |
|  16 | Jack Nicholson     |       18 |
|  11 | Brad Pitt          |       19 |
|  17 | Toshirô Mifune     |       20 |
+-----+--------------------+----------+
```

DIRECTORS:

```
mysql> select* from directors;
+-----+----------------------+----------+
| id  | name                 | movie_id |
+-----+----------------------+----------+
|   1 | Frank Darabont       |        1 |
|   2 | Francis Ford Coppola |        2 |
|   3 | Christopher Nolan    |        3 |
|   2 | Francis Ford Coppola |        4 |
|   4 | Sidney Lumet         |        5 |
|   5 | Steven Spielberg     |        6 |
|   6 | Peter Jackson        |        7 |
|   7 | Quentin Tarantino    |        8 |
|   6 | Peter Jackson        |        9 |
|   8 | Sergio Leone         |       10 |
|   9 | Robert Zemeckis      |       11 |
|  10 | David Fincher        |       12 |
|   6 | Peter Jackson        |       13 |
|   3 | Christopher Nolan    |       14 |
|  11 | Irvin Kershner       |       15 |
|  12 | Lana Wachowski       |       16 |
|  13 | Martin Scorsese      |       17 |
|  14 | Milos Forman         |       18 |
|  10 | David Fincher        |       19 |
|  15 | Akira Kurosawa       |       20 |
+-----+----------------------+----------+
```

MOVIES:

```
mysql> select* from movies;
+----+---------------------------------------------------+------+--------+
| id | name                                              | year | rating |
+----+---------------------------------------------------+------+--------+
|  1 | The Shawshank Redemption                          | 1994 |    9.2 |
|  2 | The Godfather                                     | 1972 |    9.2 |
|  3 | The Dark Knight                                   | 2008 |      9 |
|  4 | The Godfather Part II                             | 1974 |      9 |
|  5 | 12 Angry Men                                      | 1957 |      9 |
|  6 | Schindler's List                                  | 1993 |    8.9 |
|  7 | The Lord of the Rings: The Return of the King     | 2003 |    8.9 |
|  8 | Pulp Fiction                                      | 1994 |    8.8 |
|  9 | The Lord of the Rings: The Fellowship of the Ring | 2001 |    8.8 |
| 10 | The Good, the Bad and the Ugly                    | 1966 |    8.8 |
| 11 | Forrest Gump                                      | 1994 |    8.8 |
| 12 | Fight Club                                         | 1999 |    8.7 |
| 13 | The Lord of the Rings: The Two Towers             | 2002 |    8.7 |
| 14 | Inception                                         | 2010 |    8.7 |
| 15 | Star Wars: Episode V – The Empire Strikes Back    | 1980 |    8.7 |
| 16 | The Matrix                                        | 1999 |    8.7 |
| 17 | Goodfellas                                        | 1990 |    8.7 |
| 18 | One Flew Over the Cuckoo's Nest                   | 1975 |    8.6 |
| 19 | Se7en                                             | 1995 |    8.6 |
| 20 | Seven Samurai                                     | 1954 |    8.6 |
+----+---------------------------------------------------+------+--------+
```

GENRES:

```
mysql> select* from genres;
+----------+-------------+
| movie_id | Movie_genre |
+----------+-------------+
|        1 | Drama       |
|        2 | Drama       |
|        3 | Drama       |
|        3 | Action      |
|        4 | Drama       |
|        5 | Crime       |
|        6 | History     |
|        7 | Adventure   |
|        8 | Crime       |
|        9 | Adventure   |
|       10 | Adventure   |
|       11 | Romance     |
|       12 | Drama       |
|       13 | Adventure   |
|       14 | Sci-Fic     |
|       15 | Action      |
|       16 | Sci-Fic     |
|       17 | Crime       |
|       18 | Drama       |
|       19 | Crime       |
|       20 | Action      |
+----------+-------------+
```

SUBQUERIES

1.List out all actors in the movie name "The Shawshank Redemption".

```
mysql> select name from actors where movie_id in(select id from movies where name="The Shawshank Redemption" );
+----------------+
| name           |
+----------------+
| Tim Robbins    |
| Morgan Freeman |
+----------------+
```

2.Show movies whose rating is same as the maximum rating.

```
mysql> select name , rating from movies where rating >=(select max(rating) from movies);
+--------------------------+--------+
| name                     | rating |
+--------------------------+--------+
| The Shawshank Redemption |    9.2 |
| The Godfather            |    9.2 |
+--------------------------+--------+
```

3. Find the name of actors whose movie got released in year 1999.

```
mysql> select name from actors where movie_id in(select id from movies where year=1999);
+--------------+
| name         |
+--------------+
| Brad Pitt    |
| Keanu Reeves |
+--------------+
```

JOINS

1.For each movie, print name and the genres of the movie.

```
mysql> select name,Movie_genre from movies join genres on movies.id=genres.movie_id;
+-------------------------------------------------------+---------------+
| name                                                  | Movie_genre   |
+-------------------------------------------------------+---------------+
| The Shawshank Redemption                              | Drama         |
| The Godfather                                         | Drama         |
| The Dark Knight                                       | Drama         |
| The Dark Knight                                       | Action        |
| The Godfather Part II                                 | Drama         |
| 12 Angry Men                                          | Crime         |
| Schindler's List                                      | History       |
| The Lord of the Rings: The Return of the King         | Adventure     |
| Pulp Fiction                                          | Crime         |
| The Lord of the Rings: The Fellowship of the Ring     | Adventure     |
| The Good, the Bad and the Ugly                        | Adventure     |
| Forrest Gump                                          | Romance       |
| Fight Club                                            | Drama         |
| The Lord of the Rings: The Two Towers                 | Adventure     |
| Inception                                             | Sci-Fic       |
| Star Wars: Episode V - The Empire Strikes Back        | Action        |
| The Matrix                                            | Sci-Fic       |
| Goodfellas                                            | Crime         |
| One Flew Over the Cuckoo's Nest                       | Drama         |
| Se7en                                                 | Crime         |
| Seven Samurai                                         | Action        |
+-------------------------------------------------------+---------------+
```

2.Which director made the most movies?

```
mysql> select directors.name from directors join movies on directors.movie_id=movies.id group by directors.name order by
 count(directors.name) desc limit 1;
+----------------+
| name           |
+----------------+
| Peter Jackson  |
+----------------+
```

3. Using self-join find the name of movies which is rated 9?

```
mysql> select m1.name,m2.rating from movies m1, movies m2 where m1.id=m2.id and m2.rating= 9;
+-----------------------+--------+
| name                  | rating |
+-----------------------+--------+
| The Dark Knight       |      9 |
| The Godfather Part II |      9 |
| 12 Angry Men          |      9 |
+-----------------------+--------+
```

BASIC QUERIES

1.Find the name and year of some movies released between 2000 to 2012. Return movie title, movie release year.

```
mysql> select name,year from movies where year between 1900 and 2010 order by year;
+-----------------------------------------------------------+--------+
| name                                                      | year   |
+-----------------------------------------------------------+--------+
| Seven Samurai                                             | 1954   |
| 12 Angry Men                                              | 1957   |
| The Good, the Bad and the Ugly                            | 1966   |
| The Godfather                                             | 1972   |
| The Godfather Part II                                     | 1974   |
| One Flew Over the Cuckoo's Nest                           | 1975   |
| Star Wars: Episode V - The Empire Strikes Back            | 1980   |
| Goodfellas                                                | 1990   |
| Schindler's List                                          | 1993   |
| The Shawshank Redemption                                  | 1994   |
| Pulp Fiction                                              | 1994   |
| Forrest Gump                                              | 1994   |
| Se7en                                                     | 1995   |
| Fight Club                                                | 1999   |
| The Matrix                                                | 1999   |
| The Lord of the Rings: The Fellowship of the Ring         | 2001   |
| The Lord of the Rings: The Two Towers                     | 2002   |
| The Lord of the Rings: The Return of the King             | 2003   |
| The Dark Knight                                           | 2008   |
| Inception                                                 | 2010   |
+-----------------------------------------------------------+--------+
```

2. Find name of actors whose name 1st letter starts with 'B'.

```
mysql> select distinct name from actors where name like 'B%';
+-----------+
| name      |
+-----------+
| Brad Pitt |
+-----------+
```