

WORKSHEET 5 SQL

Refer the following ERD and answer all the questions in this worksheet. You have to write the queries using

MySQL for the required Operation.

Table Explanations:

❑ The movie table contains information about each movie. There are text descriptions such as title and

overview. Some fields are more obvious than others: revenue (the amount of money the movie made), budget

(the amount spent on creating the movie). Other fields are calculated based on data used to create the data

source: popularity, votes_avg, and votes_count. The status indicates if the movie is Released, Rumoured, or in

Post-Production.

❑ The country list contains a list of different countries, and the movie_country table contains a record of which

countries a movie was filmed in (because some movies are filmed in multiple countries). This is a standard

many-to-many table, and you'll find these in a lot of databases.

❑ The same concept applies to the production_company table. There is a list of production companies and a

many-to-many relationship with movies which is captured in the movie_company table.

❑ The languages table has a list of languages, and the movie_languages captures a list of languages in a movie.

The difference with this structure is the addition of a language_role table.

❑ This language_role table contains two records: Original and Spoken. A movie can have an original language

(e.g. English), but many Spoken languages. This is captured in the movie_languages table along with a role.

❑ Genres define which category a movie fits into, such as Comedy or Horror. A movie can have multiple

genres, which is why the movie_genres table exists.

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❑ The same concept applies to keywords, but there are a lot more keywords than genres. I'm not sure what

qualifies as a keyword, but you can explore the data and take a look. Some examples as “paris”, “gunslinger”,

or “saving the world”.

☐ The cast and crew section of the database is a little more complicated. Actors, actresses, and crew members

are all people, playing different roles in a movie. Rather than have separate lists of names for crew and cast,

this database contains a table called person, which has each person’s name.

☐ The movie_cast table contains records of each person in a movie as a cast member. It has their character

name, along with the cast_order, which I believe indicates that lower numbers appear higher on the cast list.

☐ The movie_cast table also links to the gender table, to indicate the gender of each character. The gender is

linked to the movie_cast table rather than the person table to cater for characters which may be a different

gender than the person, or characters of unknown gender. This means that there is no gender table linked to

the person table, but that’s because of the sample data.

☐ The movie_crew table follows a similar concept and stores all crew members for all movies. Each crew

member has a job, which is part of a department (e.g. Camera).

QUESTIONS:

1. Write SQL query to show all the data in the Movie table.

ANSWER:

```
Results=cur.execute("select * from movie")
```

```
Results.fetchall()
```

2. Write SQL query to show the title of the longest runtime movie.

ANSWER:

```
Results=cur.execute("select * from movie order by runtime movie desc limit1")
```

```
Results.fetchall()
```

3. Write SQL query to show the highest revenue generating movie title.

ANSWER:

```
Results=cur.execute("select * from movie order by highest revenue generating movie title desc limit 1")
```

```
Results.fetchall()
```

4. Write SQL query to show the movie title with maximum value of revenue/budget.

ANSWER:

```
Results=cur.execute("select * from movie order by revenue/budget desc limit 1")
```

```
Results.fetchall()
```

5. Write a SQL query to show the movie title and its cast details like name of the person, gender, character name, cast order.

ANSWER:

```
Results=cur.execute("select * from movie where name=x and gender=f and charactername=r and cast order=1")
```

Results.fetchall()

6. Write a SQL query to show the country name where maximum number of movies has been produced, along with the number of movies produced.

ANSWER:

Results=cur.execute("select * from movie order by number of movies desc and number of movies")

Results.fetchall()

7. Write a SQL query to show all the genre_id in one column and genre_name in second column.

ANSWER:

Results=cur.execute("select * from movie order by genre id and genre name")

Results.fetchall()

8. Write a SQL query to show name of all the languages in one column and number of movies in that particular column in another column.

ANSWER:

Results=cur.execute("select * from movie order by movie languages and number of movies")

Results.fetchall()

9. Write a SQL query to show movie name in first column, no. of crew members in second column and number of cast members in third column.

ANSWER:

Results=cur.execute("select * from movie where movie name and no.of crew members and number of cast members")

Results.fetchall()

10. Write a SQL query to list top 10 movies title according to popularity column in decreasing order.

ANSWER:

```
Results=cur.execute("select * from movie order by top 10 movies desc")  
Results.fetchall()
```

11. Write a SQL query to show the name of the 3rd most revenue generating movie and its revenue.

ANSWER:

```
Results=cur.execute("select * from movie order by most generating movie where desc <3 and  
revenue")  
Results.fetchall()
```

12. Write a SQL query to show the names of all the movies which have "rumoured" movie status.

ANSWER:

```
Results=cur.execute("select * from movie order by "rumoured " movie status")  
Results.fetchall()
```

13. Write a SQL query to show the name of the "United States of America" produced movie which generated maximum revenue.

ANSWER:

```
Results=cur.execute("select * from movie where name="United States of America " and order by  
revenue desc limit 1")  
Results.fetchall()
```

14. Write a SQL query to print the movie id in one column and name of the production company in the second column for all the movies.

ANSWER:

```
Results=cur.execute("select * from movie order by movie_id and order by production company ")
```

```
Results.fetchall()
```

15. Write a SQL query to show the title of top 20 movies arranged in decreasing order of their budget.

ANSWER:

```
Results=cur.execute("select * from movie order by budget desc")
```

```
Results.fetchall()
```