

## 1. A movie should have multiple media.

C:\Windows\system32\cmd.exe - mysql -u root -p

MariaDB [imdb]> SELECT \* FROM movies;

| movie_id | title       | release_year |
|----------|-------------|--------------|
| 1        | Bollywood 1 | 2023         |
| 2        | Bollywood 2 | 2022         |
| 3        | Bollywood 3 | 2021         |
| 4        | Bollywood 4 | 2020         |
| 5        | Bollywood 5 | 2019         |

5 rows in set (0.001 sec)

MariaDB [imdb]> SELECT \* FROM media;

| media_id | movie_id | media_type |
|----------|----------|------------|
| 1        | 1        | JPG,MP4    |
| 2        | 2        | .mov       |
| 3        | 3        | Jpeg,MP3   |
| 4        | 4        | png        |
| 5        | 1        | png,MP4    |

5 rows in set (0.001 sec)

MariaDB [imdb]> SELECT movies.title,movies.release\_year,media.media\_type,media.media\_id FROM movies INNER JOIN media ON movies.movie\_id = media.movie\_id;

| title       | release_year | media_type | media_id |
|-------------|--------------|------------|----------|
| Bollywood 1 | 2023         | JPG,MP4    | 1        |
| Bollywood 2 | 2022         | .mov       | 2        |
| Bollywood 3 | 2021         | Jpeg,MP3   | 3        |
| Bollywood 4 | 2020         | png        | 4        |
| Bollywood 1 | 2023         | png,MP4    | 5        |

5 rows in set (0.000 sec)

MariaDB [imdb]>

## 2. A movie can belong to multiple genre.

MariaDB [imdb]> SELECT \* FROM movies;

| movie_id | title       | release_year |
|----------|-------------|--------------|
| 1        | Bollywood 1 | 2023         |
| 2        | Bollywood 2 | 2022         |
| 3        | Bollywood 3 | 2021         |
| 4        | Bollywood 4 | 2020         |
| 5        | Bollywood 5 | 2019         |

5 rows in set (0.001 sec)

MariaDB [imdb]> SELECT \* FROM genres;

| genre_id | genre_name |
|----------|------------|
| 1        | ACTION     |
| 2        | FICTION    |
| 3        | HORROR     |
| 4        | COMEDY     |
| 5        | MYSERTY    |

5 rows in set (0.001 sec)

MariaDB [imdb]> SELECT \* FROM movie\_genres;

| movie_id | genre_id |
|----------|----------|
| 1        | 1        |
| 2        | 1        |
| 3        | 1        |
| 5        | 1        |
| 1        | 2        |
| 2        | 2        |
| 3        | 2        |
| 4        | 3        |
| 5        | 3        |
| 1        | 4        |
| 4        | 4        |
| 2        | 5        |

12 rows in set (0.000 sec)

```
MariaDB [imdb]> SELECT movies.movie_id,movies.title, GROUP_CONCAT(genres.genre_name ORDER BY genres.genre_name) as GENRES FROM movies JOIN movie_genres ON movie_genres.movie_id = movies.movie_id JOIN genres ON genres.genre_id = movie_genres.genre_id GROUP BY movies.movie_id,movies.title;
```

| movie_id | title       | GENRES                 |
|----------|-------------|------------------------|
| 1        | Bollywood 1 | ACTION,COMEDY,FICTION  |
| 2        | Bollywood 2 | ACTION,FICTION,MYSERTY |
| 3        | Bollywood 3 | ACTION,FICTION         |
| 4        | Bollywood 4 | COMEDY,HORROR          |
| 5        | Bollywood 5 | ACTION,HORROR          |

5 rows in set (0.005 sec)

### 3. A movie can have multiple reviews and Review can belong to user

```
MariaDB [imdb]> SELECT * FROM movies;
```

| movie_id | title       | release_year |
|----------|-------------|--------------|
| 1        | Bollywood 1 | 2023         |
| 2        | Bollywood 2 | 2022         |
| 3        | Bollywood 3 | 2021         |
| 4        | Bollywood 4 | 2020         |
| 5        | Bollywood 5 | 2019         |

5 rows in set (0.001 sec)

```
MariaDB [imdb]> SHOW * FROM reviews;
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '\* FROM reviews' at line 1

```
MariaDB [imdb]> SELECT * FROM reviews;
```

| review_id | movie_id | user_id | review_text             |
|-----------|----------|---------|-------------------------|
| 1         | 1        | 1       | Great songs!            |
| 2         | 2        | 2       | Amazing Movie           |
| 3         | 3        | 3       | Colourful Poster        |
| 4         | 4        | 4       | Image speaks everything |
| 5         | 5        | 5       | Housefull movie         |

5 rows in set (0.001 sec)

```
MariaDB [imdb]>
```

```
MariaDB [imdb]> SELECT movies.title, reviews.review_text, reviews.user_id
-> FROM movies
-> INNER JOIN reviews ON movies.movie_id = reviews.movie_id;
```

| title       | review_text             | user_id |
|-------------|-------------------------|---------|
| Bollywood 1 | Great songs!            | 1       |
| Bollywood 2 | Amazing Movie           | 2       |
| Bollywood 3 | Colourful Poster        | 3       |
| Bollywood 4 | Image speaks everything | 4       |
| Bollywood 5 | Housefull movie         | 5       |

5 rows in set (0.018 sec)

#### 4. An Artist can have multiple skills.

```
MariaDB [imdb]> SELECT * FROM artists;
+-----+-----+
| artist_id | artist_name |
+-----+-----+
| 1 | Actor 1 |
| 2 | Actor 2 |
| 3 | Actor 3 |
| 4 | Actor 4 |
| 5 | Actor 5 |
+-----+-----+
5 rows in set (0.001 sec)

MariaDB [imdb]> SELECT * FROM artist_roles;
+-----+-----+-----+
| artist_id | movie_id | role_id |
+-----+-----+-----+
| 1 | 1 | 1 |
| 2 | 2 | 2 |
| 4 | 2 | 3 |
| 3 | 3 | 3 |
| 3 | 4 | 5 |
| 4 | 4 | 4 |
+-----+-----+-----+
6 rows in set (0.001 sec)

MariaDB [imdb]> SELECT * FROM artist_skills;
+-----+-----+
| artist_id | skill_id |
+-----+-----+
| 1 | 1 |
| 3 | 1 |
| 4 | 1 |
| 1 | 2 |
| 2 | 2 |
| 3 | 2 |
| 4 | 2 |
| 2 | 3 |
+-----+-----+
8 rows in set (0.001 sec)

MariaDB [imdb]>
```

```
MariaDB [imdb]> SELECT * FROM skills;
+-----+-----+
| skill_id | skill_name |
+-----+-----+
| 1 | Acting |
| 2 | Dancing |
| 3 | Singing |
| 4 | comedy |
| 5 | communication |
+-----+-----+
5 rows in set (0.001 sec)

MariaDB [imdb]> SELECT artists.artist_name,
-> GROUP_CONCAT(skills.skill_name ORDER BY skills.skill_id) AS SKILLS
-> FROM artists
-> JOIN artist_skills ON artists.artist_id = artist_skills.artist_id
-> JOIN skills ON skills.skill_id = artist_skills.skill_id
-> GROUP BY artists.artist_id;
+-----+-----+
| artist_name | SKILLS |
+-----+-----+
| Actor 1 | Acting,Dancing |
| Actor 2 | Dancing,Singing |
| Actor 3 | Acting,Dancing |
| Actor 4 | Acting,Dancing |
+-----+-----+
4 rows in set (0.001 sec)

MariaDB [imdb]>
```

#### 5. Artists can perform multiple roles in a single film.

```
MariaDB [imdb]> SELECT
-> movies.title AS movie_name,
-> GROUP_CONCAT(CONCAT(artists.artist_name, '-', roles.role_name) SEPARATOR ', ') AS artist_roles
-> FROM
-> movies
-> JOIN
-> artist_roles ON artist_roles.movie_id = movies.movie_id
-> JOIN
-> artists ON artists.artist_id = artist_roles.artist_id
-> JOIN
-> roles ON roles.role_id = artist_roles.role_id
-> GROUP BY
-> movies.title;
+-----+-----+
| movie_name | artist_roles |
+-----+-----+
| Bollywood 1 | Actor 1-Lead Actor |
| Bollywood 2 | Actor 2-Lead Actor2, Actor 4-Lead Actor3 |
| Bollywood 3 | Actor 3-Lead Actor3 |
| Bollywood 4 | Actor 4-Lead Actor4, Actor 3-Lead Actor5 |
+-----+-----+
4 rows in set (0.001 sec)
```