IMDB Database:

Creating IMDB Database:


```
MariaDB [(none)]> create database IMDB
    -> create database IMDB;
ERROR 1064 (42000): You have an error in you
MariaDB [(none)]> create database IMDB;
Query OK, 1 row affected (0.004 sec)

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| IMDB               |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| test               |
+--------------------+
6 rows in set (0.002 sec)

MariaDB [(none)]> use IMDB;
No connection. Trying to reconnect...
Connection id:    13
Current database: *** NONE ***

Database changed
```


Creating Tables:

Movies Table


```
MariaDB [IMDB]> CREATE TABLE movies(movie_id int AUTO_INCREMENT PRIMARY KEY, movie_name VARCHAR(200), year INT);
Query OK, 0 rows affected (0.041 sec)

MariaDB [IMDB]> INSERT INTO movies(movie_name,year)VALUES ('Inception', 2010),
    -> ('The Dark Knight', 2008),
    -> ('Interstellar', 2014),
    -> ('The Matrix', 1999),
    -> ('Titanic', 1997),
    -> ('Avatar', 2009),
    -> ('The Godfather', 1972),
    -> ('Gladiator', 2000),
    -> ('Pulp Fiction', 1994),
    -> ('Fight Club', 1999);
Query OK, 10 rows affected (0.011 sec)
Records: 10  Duplicates: 0  Warnings: 0
```


Media Table

```
MariaDB [IMDB]> CREATE TABLE media(media_id int AUTO_INCREMENT PRIMARY KEY, movie_id int, media_type VARCHAR(200), media_url VARCHAR(200), FOREIGN KEY (movie_id) REFERENCES movies(movie_id));
Query OK, 0 rows affected (0.028 sec)

MariaDB [IMDB]> INSERT INTO media (movie_id, media_type, media_url) VALUES
    -> (1, 'image', 'https://example.com/inception-poster.jpg'),
    -> (1, 'video', 'https://example.com/inception-trailer.mp4'),
    -> (2, 'image', 'https://example.com/dark-knight-poster.jpg'),
    -> (2, 'video', 'https://example.com/dark-knight-trailer.mp4'),
    -> (3, 'image', 'https://example.com/interstellar-poster.jpg'),
    -> (3, 'video', 'https://example.com/interstellar-trailer.mp4'),
    -> (4, 'image', 'https://example.com/matrix-poster.jpg'),
    -> (4, 'video', 'https://example.com/matrix-trailer.mp4'),
    -> (5, 'image', 'https://example.com/titanic-poster.jpg'),
    -> (5, 'video', 'https://example.com/titanic-trailer.mp4'),
    -> (6, 'image', 'https://example.com/avatar-poster.jpg'),
    -> (6, 'video', 'https://example.com/avatar-trailer.mp4'),
    -> (7, 'image', 'https://example.com/godfather-poster.jpg'),
    -> (7, 'video', 'https://example.com/godfather-trailer.mp4'),
    -> (8, 'image', 'https://example.com/gladiator-poster.jpg'),
    -> (8, 'video', 'https://example.com/gladiator-trailer.mp4'),
    -> (9, 'image', 'https://example.com/pulp-fiction-poster.jpg'),
    -> (9, 'video', 'https://example.com/pulp-fiction-trailer.mp4'),
    -> (10, 'image', 'https://example.com/fight-club-poster.jpg'),
    -> (10, 'video', 'https://example.com/fight-club-trailer.mp4');
Query OK, 20 rows affected (0.004 sec)
Records: 20  Duplicates: 0  Warnings: 0
```

Genre Table

```
[MariaDB [IMDB]> CREATE TABLE genre(genre_id int AUTO_INCREMENT PRIMARY KEY, movie_id int, genre_type VARCHAR(200), FOREIGN KEY (movie_id) REFERENCES movies(movie_id));
Query OK, 0 rows affected (0.026 sec)

MariaDB [IMDB]> INSERT INTO genre (movie_id, genre_type) VALUES
    -> (1, 'Sci-Fi'),
    -> (1, 'Thriller'),
    -> (2, 'Action'),
    -> (2, 'Crime'),
    -> (3, 'Sci-Fi'),
    -> (3, 'Drama'),
    -> (4, 'Sci-Fi'),
    -> (4, 'Action'),
    -> (5, 'Romance'),
    -> (5, 'Drama'),
    -> (6, 'Sci-Fi'),
    -> (6, 'Adventure'),
    -> (7, 'Crime'),
    -> (7, 'Drama'),
    -> (8, 'Action'),
    -> (8, 'Historical'),
    -> (9, 'Drama'),
    -> (9, 'Comedy'),
    -> (10, 'Drama'),
[   -> (10, 'Thriller');
Query OK, 20 rows affected (0.004 sec)
Records: 20  Duplicates: 0  Warnings: 0
```

Reviews Table

```
[MariaDB [IMDB]> CREATE TABLE reviews (review_id INT AUTO_INCREMENT PRIMARY KEY, movie_id INT,user_id INT,reviews TEXT, FOREIGN KEY (movie_id) REFERENCES movies(movie_id), FOREIGN KEY (user_id) REFERENCES ]
user(user_id));
Query OK, 0 rows affected (0.029 sec)

MariaDB [IMDB]> INSERT INTO reviews (movie_id, user_id, reviews) VALUES
    -> (1, 1, 'A mind-bending experience!'),
    -> (1, 2, 'Incredible visual effects.'),
    -> (2, 3, 'The best superhero movie ever!'),
    -> (3, 4, 'An emotional journey through space.'),
    -> (4, 5, 'A revolutionary sci-fi film.'),
    -> (5, 6, 'A beautiful love story.'),
    -> (6, 7, 'A visual masterpiece.'),
    -> (7, 8, 'A classic that never gets old.'),
    -> (8, 9, 'Epic action sequences.'),
    -> (9, 10, 'A deep and thought-provoking film.'),
[   -> (10, 1, 'An unforgettable tale of survival.');                                                    ]
Query OK, 11 rows affected (0.003 sec)
Records: 11 Duplicates: 0 Warnings: 0
```

User Table

```
[MariaDB [IMDB]> CREATE TABLE user(user_id INT AUTO_INCREMENT PRIMARY KEY, user_name VARCHAR(200));
Query OK, 0 rows affected (0.029 sec)

MariaDB [IMDB]> INSERT INTO user (user_name) VALUES
    -> ('Alice Johnson'),
    -> ('Bob Smith'),
    -> ('Charlie Brown'),
    -> ('David Wilson'),
    -> ('Emma Davis'),
    -> ('Frank Miller'),
    -> ('Grace Lee'),
    -> ('Henry Thomas'),
    -> ('Isla Williams'),
[   -> ('Jack Davis');
Query OK, 10 rows affected (0.004 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

Artist Table

```
[MariaDB [IMDB]> CREATE TABLE artist(artist_id INT AUTO_INCREMENT PRIMARY KEY, artist_name VARCHAR(200));
Query OK, 0 rows affected (0.029 sec)

MariaDB [IMDB]> INSERT INTO artist (artist_name) VALUES
    -> ('Leonardo DiCaprio'),
    -> ('Christian Bale'),
    -> ('Matthew McConaughey'),
    -> ('Keanu Reeves'),
    -> ('Kate Winslet'),
    -> ('Heath Ledger'),
    -> ('Anne Hathaway'),
    -> ('Tom Hardy'),
    -> ('Robert De Niro'),
[   -> ('Russell Crowe');
Query OK, 10 rows affected (0.004 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

Artist Skills Table

```
[MariaDB [IMDB]> CREATE TABLE artist_skills(skill_id INT AUTO_INCREMENT PRIMARY KEY, artist_id INT, skills VARCHAR(200), FOREIGN KEY (artist_id) REFERENCES artist(artist_id));
Query OK, 0 rows affected (0.026 sec)

MariaDB [IMDB]> INSERT INTO artist_skills (artist_id, skills) VALUES
    -> (1, 'Acting'),
    -> (1, 'Producing'),
    -> (2, 'Acting'),
    -> (2, 'Voice Acting'),
    -> (3, 'Acting'),
    -> (4, 'Acting'),
    -> (5, 'Acting'),
    -> (6, 'Acting'),
    -> (7, 'Acting'),
    -> (8, 'Acting'),
    -> (9, 'Acting'),
    -> (10, 'Acting'),
    -> (10, 'Directing');
Query OK, 13 rows affected (0.002 sec)
Records: 13  Duplicates: 0  Warnings: 0
```

Artist Roles Table

```
[MariaDB [IMDB]> CREATE TABLE artist_roles(role_id INT AUTO_INCREMENT PRIMARY KEY, artist_id INT, movie_id INT, role VARCHAR(200), FOREIGN KEY (artist_id) REFERENCES artist(artist_id), FOREIGN KEY (movie_i
d) REFERENCES movies(movie_id));
Query OK, 0 rows affected (0.029 sec)

MariaDB [IMDB]> INSERT INTO artist_roles (artist_id, movie_id, role) VALUES
    -> (1, 1, 'Cobb'),
    -> (2, 2, 'Bruce Wayne'),
    -> (3, 3, 'Cooper'),
    -> (4, 4, 'Neo'),
    -> (5, 5, 'Rose DeWitt Bukater'),
    -> (6, 2, 'The Joker'),
    -> (7, 3, 'Brand'),
    -> (8, 6, 'Jake Sully'),
    -> (9, 7, 'Michael Corleone'),
    -> (10, 8, 'Maximus Decimus Meridius'),
    -> (10, 9, 'Vincent Vega'),
    -> (1, 10, 'The Narrator');
Query OK, 12 rows affected (0.002 sec)
Records: 12  Duplicates: 0  Warnings: 0
```

All tables in IMDB:

```
[MariaDB [IMDB]> show tables;
+----------------+
| Tables_in_IMDB |
+----------------+
| artist         |
| artist_roles   |
| artist_skills  |
| genre          |
| media          |
| movies         |
| reviews        |
| user           |
+----------------+
8 rows in set (0.001 sec)
```

Movie should have multiple media (Video or Image):

```
[MariaDB [IMDB]> SELECT m.movie_id,m.movie_name,me.media_type FROM media me INNER JOIN movies m ON me.movie_id=m.movie_id;
+----------+-----------------+------------+
| movie_id | movie_name      | media_type |
+----------+-----------------+------------+
|        1 | Inception       | image      |
|        1 | Inception       | video      |
|        2 | The Dark Knight | image      |
|        2 | The Dark Knight | video      |
|        3 | Interstellar    | image      |
|        3 | Interstellar    | video      |
|        4 | The Matrix      | image      |
|        4 | The Matrix      | video      |
|        5 | Titanic         | image      |
|        5 | Titanic         | video      |
|        6 | Avatar          | image      |
|        6 | Avatar          | video      |
|        7 | The Godfather   | image      |
|        7 | The Godfather   | video      |
|        8 | Gladiator       | image      |
|        8 | Gladiator       | video      |
|        9 | Pulp Fiction    | image      |
|        9 | Pulp Fiction    | video      |
|       10 | Fight Club      | image      |
|       10 | Fight Club      | video      |
+----------+-----------------+------------+
20 rows in set (0.001 sec)
```

Movie can belong to multiple Genre:

```
[MariaDB [IMDB]> SELECT m.movie_id,m.movie_name,m.year, g.genre_type FROM movies m INNER JOIN genre g ON m.movie_id=g.movie_id;
+----------+-----------------+------+------------+
| movie_id | movie_name      | year | genre_type |
+----------+-----------------+------+------------+
|        1 | Inception       | 2010 | Sci-Fi     |
|        1 | Inception       | 2010 | Thriller   |
|        2 | The Dark Knight | 2008 | Action     |
|        2 | The Dark Knight | 2008 | Crime      |
|        3 | Interstellar    | 2014 | Sci-Fi     |
|        3 | Interstellar    | 2014 | Drama      |
|        4 | The Matrix      | 1999 | Sci-Fi     |
|        4 | The Matrix      | 1999 | Action     |
|        5 | Titanic         | 1997 | Romance    |
|        5 | Titanic         | 1997 | Drama      |
|        6 | Avatar          | 2009 | Sci-Fi     |
|        6 | Avatar          | 2009 | Adventure  |
|        7 | The Godfather   | 1972 | Crime      |
|        7 | The Godfather   | 1972 | Drama      |
|        8 | Gladiator       | 2000 | Action     |
|        8 | Gladiator       | 2000 | Historical |
|        9 | Pulp Fiction    | 1994 | Drama      |
|        9 | Pulp Fiction    | 1994 | Comedy     |
|       10 | Fight Club      | 1999 | Drama      |
|       10 | Fight Club      | 1999 | Thriller   |
+----------+-----------------+------+------------+
20 rows in set (0.005 sec)
```

Movie can have multiple reviews, and Review can belong to a user:

```
[MariaDB [IMDB]> SELECT m.movie_id,m.movie_name,r.reviews,u.user_name FROM movies m JOIN reviews r ON m.movie_id=r.movie_id JOIN user u ON r.user_id=u.user_id;
+----------+-----------------+----------------------------------+---------------+
| movie_id | movie_name      | reviews                          | user_name     |
+----------+-----------------+----------------------------------+---------------+
|        1 | Inception       | A mind-bending experience!       | Alice Johnson |
|        1 | Inception       | Incredible visual effects.       | Bob Smith     |
|        2 | The Dark Knight | The best superhero movie ever!   | Charlie Brown |
|        3 | Interstellar    | An emotional journey through space. | David Wilson |
|        4 | The Matrix      | A revolutionary sci-fi film.     | Emma Davis    |
|        5 | Titanic         | A beautiful love story.          | Frank Miller  |
|        6 | Avatar          | A visual masterpiece.            | Grace Lee     |
|        7 | The Godfather   | A classic that never gets old.   | Henry Thomas  |
|        8 | Gladiator       | Epic action sequences.           | Isla Williams |
|        9 | Pulp Fiction    | A deep and thought-provoking film. | Jack Davis   |
|       10 | Fight Club      | An unforgettable tale of survival. | Alice Johnson |
+----------+-----------------+----------------------------------+---------------+
11 rows in set (0.002 sec)
```

Artist can have multiple skills:

```
[MariaDB [IMDB]> SELECT a.artist_name, s.skills FROM artist a INNER JOIN artist_skills s ON a.artist_id=s.artist_id;
+---------------------+--------------+
| artist_name         | skills       |
+---------------------+--------------+
| Leonardo DiCaprio   | Acting       |
| Leonardo DiCaprio   | Producing    |
| Christian Bale      | Acting       |
| Christian Bale      | Voice Acting |
| Matthew McConaughey | Acting       |
| Keanu Reeves        | Acting       |
| Kate Winslet        | Acting       |
| Heath Ledger        | Acting       |
| Anne Hathaway       | Acting       |
| Tom Hardy           | Acting       |
| Robert De Niro      | Acting       |
| Russell Crowe       | Acting       |
| Russell Crowe       | Directing    |
+---------------------+--------------+
13 rows in set (0.001 sec)
```

Artist can perform multiple roles in a single film :

```
[MariaDB [IMDB]> SELECT m.movie_id, m.movie_name, a.artist_name, r.role FROM movies m JOIN artist_roles r ON m.movie_id=r.movie_id JOIN artist a ON r.artist_id=a.artist_id;
+----------+----------------+---------------------+--------------------------+
| movie_id | movie_name     | artist_name         | role                     |
+----------+----------------+---------------------+--------------------------+
|        1 | Inception      | Leonardo DiCaprio   | Cobb                     |
|        2 | The Dark Knight| Christian Bale      | Bruce Wayne              |
|        3 | Interstellar   | Matthew McConaughey | Cooper                   |
|        4 | The Matrix     | Keanu Reeves        | Neo                      |
|        5 | Titanic        | Kate Winslet        | Rose DeWitt Bukater      |
|        2 | The Dark Knight| Heath Ledger        | The Joker                |
|        3 | Interstellar   | Anne Hathaway       | Brand                    |
|        6 | Avatar         | Tom Hardy           | Jake Sully               |
|        7 | The Godfather  | Robert De Niro      | Michael Corleone         |
|        8 | Gladiator      | Russell Crowe       | Maximus Decimus Meridius |
|        9 | Pulp Fiction   | Russell Crowe       | Vincent Vega             |
|       10 | Fight Club     | Leonardo DiCaprio   | The Narrator             |
+----------+----------------+---------------------+--------------------------+
12 rows in set (0.002 sec)
```