Table creation code

**CREATE** **TABLE** Movies (

**Code** INTEGER **PRIMARY** **KEY**,

Title VARCHAR(255) **NOT** NULL,

Rating VARCHAR(255)

);

**CREATE** **TABLE** MovieTheaters (

**Code** INTEGER **PRIMARY** **KEY**,

**Name** VARCHAR(255) **NOT** NULL,

Movie INTEGER,

**FOREIGN** **KEY** (Movie) **REFERENCES** Movies(**Code**)

) **ENGINE**=INNODB;

## Sample dataset

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(9,'Citizen King','G');

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(1,'Citizen Kane','PG');

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(2,'Singin'' in the Rain','G');

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(3,'The Wizard of Oz','G');

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(4,'The Quiet Man',**NULL**);

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(5,'North by Northwest',**NULL**);

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(6,'The Last Tango in Paris','NC-17');

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(7,'Some Like it Hot','PG-13');

**INSERT** **INTO** Movies(Code,Title,Rating) **VALUES**(8,'A Night at the Opera',**NULL**);

**INSERT** **INTO** MovieTheaters(Code,Name,Movie) **VALUES**(1,'Odeon',5);

**INSERT** **INTO** MovieTheaters(Code,Name,Movie) **VALUES**(2,'Imperial',1);

**INSERT** **INTO** MovieTheaters(Code,Name,Movie) **VALUES**(3,'Majestic',**NULL**);

**INSERT** **INTO** MovieTheaters(Code,Name,Movie) **VALUES**(4,'Royale',6);

**INSERT** **INTO** MovieTheaters(Code,Name,Movie) **VALUES**(5,'Paraiso',3);

**INSERT** **INTO** MovieTheaters(Code,Name,Movie) **VALUES**(6,'Nickelodeon',**NULL**);

Exercises

1. Select the title of all movies.

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**SELECT** Title

**FROM** Movies;

2. Show all the distinct ratings in the database.

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**SELECT** **DISTINCT** Rating

**FROM** Movies;

3. Show all unrated movies.

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**SELECT** \*

**FROM** Movies

**WHERE** Rating **IS** **NULL**;

4. Select all movie theaters that are not currently showing a movie.

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**SELECT** \*

**FROM** MovieTheaters

**WHERE** Movie **IS** **NULL**;

5. Select all data from all movie theaters and, additionally, the data from the movie that is being shown in the theater (if one is being shown).

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**SELECT** \*

**FROM** MovieTheaters **LEFT** **JOIN** Movies

**ON** MovieTheaters.Movie = Movies.Code;

6. Select all data from all movies and, if that movie is being shown in a theater, show the data from the theater.

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**SELECT** \*

**FROM** MovieTheaters **RIGHT** **JOIN** Movies

**ON** MovieTheaters.Movie = Movies.Code;

7. Show the titles of movies not currently being shown in any theaters.

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*/\* With JOIN \*/*

**SELECT** Movies.Title

**FROM** MovieTheaters **RIGHT** **JOIN** Movies

**ON** MovieTheaters.Movie = Movies.Code

**WHERE** MovieTheaters.Movie **IS** **NULL**;

*/\* With subquery \*/*

**SELECT** Title **FROM** Movies

**WHERE** Code **NOT** **IN**

(

**SELECT** Movie **FROM** MovieTheaters

**WHERE** Movie **IS** **NOT** **NULL**

);

8. Add the unrated movie "One, Two, Three".

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**INSERT** **INTO** Movies(Title,Rating) **VALUES**('One, Two, Three',**NULL**);

9. Set the rating of all unrated movies to "G".

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**UPDATE** Movies **SET** Rating='G' **WHERE** Rating **IS** **NULL**;

10. Remove movie theaters projecting movies rated "NC-17".

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**DELETE** **FROM** MovieTheaters **WHERE** Movie **IN**

(**SELECT** Code **FROM** Movies **WHERE** Rating = 'NC-17');