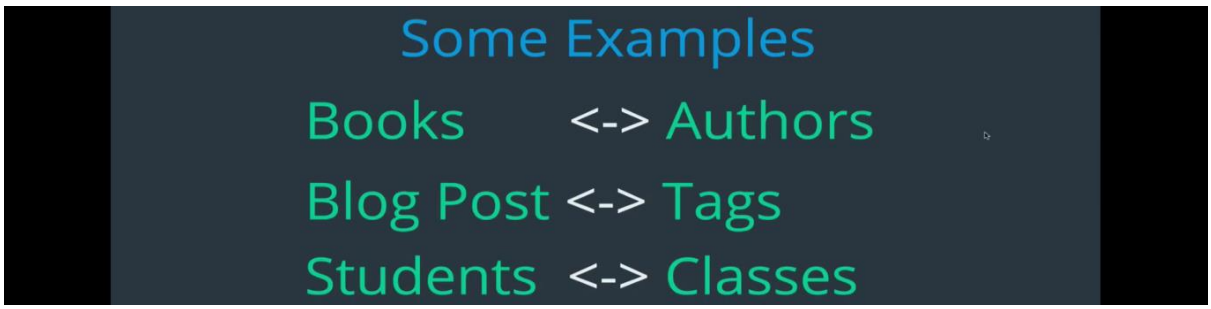
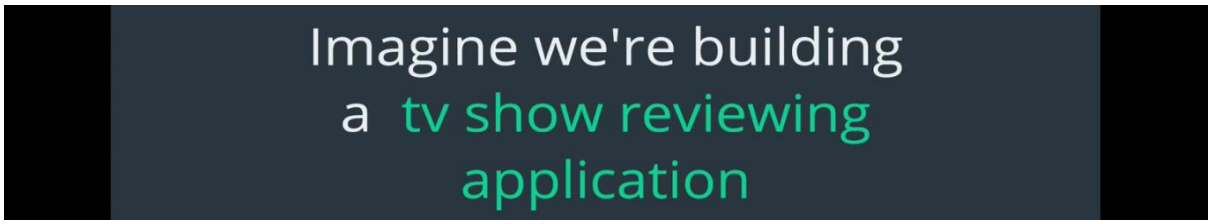
Lesson 13- (Relationship) many to many

1- Many to many basics
2- Crating our tables
3- TV joins challenges 1
4- Tv joins challenges 1 solution
5- Tv join challenges 2
6- Tv join challenges 2 solution
7- Tv joins challenges 3
8- Tv join challenges 3 solution
9- Tv joins challenges 4
10- Tv join challenges 4 solution
11- Tv joins challenges 5
12- Tv join challenges 5 solution
13- Tv joins challenges 6
14- Tv join challenges 6 solution
15- Tv joins challenges 7
16- Tv join challenges 7 solution

Many to many relationship

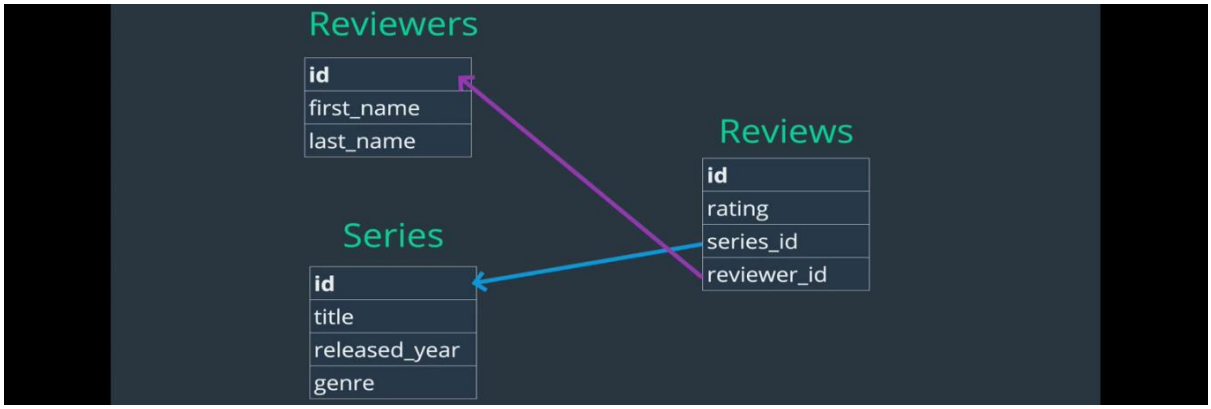




Series Data
Reviewers Data

Series Data
Reviews Data
Reviewers Data

Reviewers
id
first_name
last_name
Reviewer
id
rating
series_id
reviewer_id
Series
id
title
released_year
genre


Reviewers
id
first_name
last_name
Reviews
id
rating
series_id
reviewer_id
Series
id
title
released_year
genre

Reviewers

id	first_name	last_name
1	Blue	Steele
2	Wyatt	Earp

Series

id	title	released_year	genre
1	Archer	2009	Animation
2	Fargo	2014	Drama

Reviews

id	rating	reviewer_id	series_id
1	8.9	1	2
2	9.5	2	2

Create and insert and read table

```sql
CREATE TABLE reviewers (
    id INT AUTO_INCREMENT PRIMARY KEY,
    first_name VARCHAR(100),
    last_name VARCHAR(100)
);

CREATE TABLE series(
    id INT AUTO_INCREMENT PRIMARY KEY,
    title VARCHAR(100),
    released_year YEAR(4),
    genre VARCHAR(100)
);
```

```sql
CREATE TABLE reviews (
    id INT AUTO_INCREMENT PRIMARY KEY,
    rating DECIMAL(2,1),
    series_id INT,
    reviewer_id INT,
    FOREIGN KEY(series_id) REFERENCES series(id),
    FOREIGN KEY(reviewer_id) REFERENCES reviewers(id)
);
```

NOW LET'S DO STUFF

title	rating
Archer	8.0
Archer	7.5
Archer	8.5
Archer	7.7
Archer	8.9
Arrested Development	8.1
Arrested Development	6.0
Arrested Development	8.0
Arrested Development	8.4
Arrested Development	9.9
Bob's Burgers	7.0
Bob's Burgers	7.5
Bob's Burgers	8.0
Bob's Burgers	7.1
Bob's Burgers	8.0

```sql
SELECT * FROM series;
```

```sql
SELECT * FROM series
JOIN reviews
    ON series.id = reviews.series_id;
```

1	Archer	2009	Animation	1	8.0	1
1	Archer	2009	Animation	2	7.5	1
1	Archer	2009	Animation	3	8.5	1
1	Archer	2009	Animation	4	7.7	1
1	Archer	2009	Animation	5	8.9	1
2	Arrested Development	2003	Comedy	6	8.1	2

```sql
SELECT
    title,
    rating
FROM series
JOIN reviews
    ON series.id = reviews.series_id;
```

title	rating
Archer	8.0
Archer	7.5
Archer	8.5
Archer	7.7
Archer	8.9
Arrested Development	8.1
Arrested Development	6.0
Arrested Development	8.0

title	avg_rating
General Hospital	5.38000
Bob's Burgers	7.52000
Seinfeld	7.60000
Bojack Horseman	7.94000
Arrested Development	8.08000
Curb Your Enthusiasm	8.12000
Archer	8.12000
Freaks and Geeks	8.60000
Stranger Things	8.76667
Breaking Bad	9.36000
Fargo	9.40000
Halt and Catch Fire	9.90000

```sql
SELECT
    title,
    rating
FROM series
JOIN reviews
    ON series.id = reviews.series_id;
```

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title	rating
Archer	8.0
Archer	7.5
Archer	8.5
Archer	7.7
Archer	8.9
Arrested Development	8.1
Arrested Development	6.0
Arrested Development	8.0
Arrested Development	8.4
Arrested Development	9.9
Bob's Burgers	7.0
Bob's Burgers	7.5

```sql
SELECT
    series.id,
    title,
    rating
FROM series
JOIN reviews
    ON series.id = reviews.series_id;
```

id	title	rating
1	Archer	8.0
1	Archer	7.5
1	Archer	8.5
1	Archer	7.7
1	Archer	8.9
2	Arrested Development	8.1
2	Arrested Development	6.0
2	Arrested Development	8.0
2	Arrested Development	8.4
2	Arrested Development	9.9

```sql
SELECT
    series.id,
    title,
    rating
FROM series
JOIN reviews
    ON series.id = reviews.series_id
GROUP BY series.id;
```

id	title	rating
1	Archer	8.0
2	Arrested Development	8.1
3	Bob's Burgers	7.0
4	Bojack Horseman	7.5
5	Breaking Bad	9.5
6	Curb Your Enthusiasm	6.5
7	Fargo	9.1
8	Freaks and Geeks	8.5
9	General Hospital	5.5
10	Halt and Catch Fire	9.9

```sql
SELECT
    series.id,
    title,
    AVG(rating) as avg_rating
FROM series
JOIN reviews
    ON series.id = reviews.series_id
GROUP BY series.id;
```

id	title	avg_rating
1	Archer	8.12000
2	Arrested Development	8.08000
3	Bob's Burgers	7.52000
4	Bojack Horseman	7.94000
5	Breaking Bad	9.36000
6	Curb Your Enthusiasm	8.12000
7	Fargo	9.40000
8	Freaks and Geeks	8.60000
9	General Hospital	5.38000
10	Halt and Catch Fire	9.90000
13	Seinfeld	7.60000

```sql
SELECT
    title,
    AVG(rating) as avg_rating
FROM series
JOIN reviews
    ON series.id = reviews.series_id
GROUP BY series.id
ORDER BY avg_rating;
```

title	avg_rating
General Hospital	5.38000
Bob's Burgers	7.52000
Seinfeld	7.60000
Bojack Horseman	7.94000
Arrested Development	8.08000
Archer	8.12000
Curb Your Enthusiasm	8.12000
Freaks and Geeks	8.60000
Stranger Things	8.76667
Breaking Bad	9.36000

first_name	last_name	rating
Thomas	Stoneman	8.0
Thomas	Stoneman	8.1
Thomas	Stoneman	7.0
Thomas	Stoneman	7.5
Thomas	Stoneman	9.5
Wyatt	Skaggs	7.5
Wyatt	Skaggs	7.6
Wyatt	Skaggs	9.3
Wyatt	Skaggs	6.5
Wyatt	Skaggs	8.4
Wyatt	Skaggs	9.1
Wyatt	Skaggs	7.8
Wyatt	Skaggs	5.5
Wyatt	Skaggs	8.5
Kimbra	Masters	8.5
Kimbra	Masters	8.0
Kimbra	Masters	7.1
Kimbra	Masters	7.8

```sql
-- CHALLENGE 3
SELECT * FROM reviewers;
```

id	first_name	last_name
1	Thomas	Stoneman
2	Wyatt	Skaggs
3	Kimbra	Masters
4	Domingo	Cortes
5	Colt	Steele
6	Pinkie	Petit
7	Marlon	Crafford

7 rows in set (0.00 sec)

```sql
SELECT * FROM reviewers;
SELECT * FROM reviews;
```

```sql
SELECT * FROM reviewers
JOIN reviews
    ON reviewers.id = reviews.reviewer_id;
```

id	first_name	last_name	id	rating	series_id	reviewer_id
1	Thomas	Stoneman	1	8.0	1	1
1	Thomas	Stoneman	6	8.1	2	1
1	Thomas	Stoneman	11	7.0	3	1
1	Thomas	Stoneman	16	7.5	4	1
1	Thomas	Stoneman	21	9.5	5	1
2	Wyatt	Skaggs	2	7.5	1	2
2	Wyatt	Skaggs	19	7.6	4	2
2	Wyatt	Skaggs	24	9.3	5	2
2	Wyatt	Skaggs	26	6.5	6	2

```sql
SELECT
    first_name,
    last_name,
    rating
FROM reviewers
JOIN reviews
    ON reviewers.id = reviews.reviewer_id;
```

first_name	last_name	rating
Thomas	Stoneman	8.0
Thomas	Stoneman	8.1
Thomas	Stoneman	7.0
Thomas	Stoneman	7.5
Thomas	Stoneman	9.5
Wyatt	Skaggs	7.5
Wyatt	Skaggs	7.6

```sql
SELECT
    first_name,
    last_name,
    rating
FROM reviewers
INNER JOIN reviews
    ON reviewers.id = reviews.reviewer_id;
```

first_name	last_name	rating
Thomas	Stoneman	8.0
Thomas	Stoneman	8.1
Thomas	Stoneman	7.0
Thomas	Stoneman	7.5
Thomas	Stoneman	9.5
Wyatt	Skaggs	7.5
Wyatt	Skaggs	7.6

```
+-----------------------+
| unreviewed_series     |
+-----------------------+
| Malcolm In The Middle |
| Pushing Daisies       |
+-----------------------+
```

```sql
SELECT *
FROM series;
```

```
| 1 | Archer                | 2009 | Animation |
| 2 | Arrested Development  | 2003 | Comedy    |
| 3 | Bob's Burgers         | 2011 | Animation |
| 4 | Bojack Horseman       | 2014 | Animation |
| 5 | Breaking Bad          | 2008 | Drama     |
| 6 | Curb Your Enthusiasm  | 2000 | Comedy    |
| 7 | Fargo                 | 2014 | Drama     |
| 8 | Freaks and Geeks      | 1999 | Comedy    |
| 9 | General Hospital      | 1963 | Drama     |
| 10 | Halt and Catch Fire  | 2014 | Drama     |
| 11 | Malcolm In The Middle | 2000 | Comedy    |
| 12 | Pushing Daisies      | 2007 | Comedy    |
| 13 | Seinfeld             | 1989 | Comedy    |
| 14 | Stranger Things      | 2016 | Drama     |
```

```sql
SELECT *
FROM series
INNER JOIN reviews
    ON series.id = reviews.series_id;
```

```
| id | title                | released_year | genre     | id | rating | series_id | review
er_id |
+----+----------------------+---------------+-----------+----+--------+-----------+-------
------+
| 1 | Archer                |          2009 | Animation |  1 |    8.0 |         1 |
    1 |
| 1 | Archer                |          2009 | Animation |  2 |    7.5 |         1 |
    2 |
| 1 | Archer                |          2009 | Animation |  3 |    8.5 |         1 |
    3 |
| 1 | Archer                |          2009 | Animation |  4 |    7.7 |         1 |
    4 |
| 1 | Archer                |          2009 | Animation |  5 |    8.9 |         1 |
```

```sql
SELECT *
FROM series
LEFT JOIN reviews
    ON series.id = reviews.series_id;
```

```
---------+
| id | title                | released_year | genre     | id   | rating | series_id | rev
iewer_id |
+----+----------------------+---------------+-----------+------+--------+-----------+----
---------+
| 1 | Archer                |          2009 | Animation |    1 |    8.0 |         1 |
      1 |
| 1 | Archer                |          2009 | Animation |    2 |    7.5 |         1 |
      2 |
| 1 | Archer                |          2009 | Animation |    3 |    8.5 |         1 |
      3 |
| 1 | Archer                |          2009 | Animation |    4 |    7.7 |         1 |
      4 |
| 1 | Archer                |          2009 | Animation |    5 |    8.9 |         1 |
      5 |
```

```sql
SELECT
    title,
    rating
FROM series
LEFT JOIN reviews
    ON series.id = reviews.series_id;
```

```
+----------------------+--------+
| title                | rating |
+----------------------+--------+
| Archer               |    8.0 |
| Archer               |    7.5 |
| Archer               |    8.5 |
| Archer               |    7.7 |
| Archer               |    8.9 |
| Arrested Development |    8.1 |
| Arrested Development |    6.0 |
| Arrested Development |    8.0 |
| Arrested Development |    8.4 |
```

```sql
SELECT
    title,
    rating
FROM series
LEFT JOIN reviews
    ON series.id = reviews.series_id
WHERE rating IS NULL;
```

```
    -> WHERE rating IS NULL;
+-----------------------+--------+
| title                 | rating |
+-----------------------+--------+
| Malcolm In The Middle |   NULL |
| Pushing Daisies       |   NULL |
+-----------------------+--------+
2 rows in set (0.00 sec)
```

```
SELECT *
FROM series
LEFT JOIN reviews
    ON series.id = reviews.series_id
WHERE rating IS NULL;
```

```
+----+-----------------------+---------------+--------+-------+--------+-----------+--------
------+
| id | title                 | released_year | genre  | id    | rating | series_id | review
er_id |
+----+-----------------------+---------------+--------+-------+--------+-----------+--------
------+
| 11 | Malcolm In The Middle |          2000 | Comedy | NULL |   NULL |      NULL |
 NULL |
| 12 | Pushing Daisies       |          2007 | Comedy | NULL |   NULL |      NULL |
 NULL |
+----+-----------------------+---------------+--------+-------+--------+-----------+--------
```

```
SELECT title
FROM series
LEFT JOIN reviews
    ON series.id = reviews.series_id
WHERE rating IS NULL;
```

```
+-----------------------+
| title                 |
+-----------------------+
| Malcolm In The Middle |
| Pushing Daisies       |
+-----------------------+
2 rows in set (0.00 sec)
```

```
SELECT title AS unreviewed_series
FROM series
LEFT JOIN reviews
    ON series.id = reviews.series_id
WHERE rating IS NULL;
```

```
+-----------------------+
| unreviewed_series     |
+-----------------------+
| Malcolm In The Middle |
| Pushing Daisies       |
+-----------------------+
2 rows in set (0.00 sec)
```

genre	avg_rating
Animation	7.86000
Comedy	8.16250
Drama	8.04375

```
SELECT * FROM series;
```

id	title	released_year	genre
1	Archer	2009	Animation
2	Arrested Development	2003	Comedy
3	Bob's Burgers	2011	Animation
4	Bojack Horseman	2014	Animation
5	Breaking Bad	2008	Drama
6	Curb Your Enthusiasm	2000	Comedy
7	Fargo	2014	Drama
8	Freaks and Geeks	1999	Comedy
9	General Hospital	1963	Drama
10	Halt and Catch Fire	2014	Drama
11	Malcolm In The Middle	2000	Comedy
12	Pushing Daisies	2007	Comedy

```
SELECT * FROM series
JOIN reviews
    ON series.id = reviews.series_id;
```

```
| 5 | Breaking Bad         |          2008 | Drama     | 22 |    9.0 |          5 |
  3 |
| 5 | Breaking Bad         |          2008 | Drama     | 23 |    9.1 |          5 |
  4 |
| 5 | Breaking Bad         |          2008 | Drama     | 24 |    9.3 |          5 |
  2 |
| 5 | Breaking Bad         |          2008 | Drama     | 25 |    9.9 |          5 |
  5 |
| 6 | Curb Your Enthusiasm |          2000 | Comedy    | 26 |    6.5 |          6 |
  2 |
| 6 | Curb Your Enthusiasm |          2000 | Comedy    | 27 |    7.8 |          6 |
  3 |
| 6 | Curb Your Enthusiasm |          2000 | Comedy    | 28 |    8.8 |          6 |
```

```sql
SELECT
    title,
    genre,
    rating
FROM series
JOIN reviews
    ON series.id = reviews.series_id;
```

```
| title                | genre     | rating |
+----------------------+-----------+--------+
| Archer               | Animation |    8.0 |
| Archer               | Animation |    7.5 |
| Archer               | Animation |    8.5 |
| Archer               | Animation |    7.7 |
| Archer               | Animation |    8.9 |
| Arrested Development | Comedy    |    8.1 |
| Arrested Development | Comedy    |    6.0 |
| Arrested Development | Comedy    |    8.0 |
| Arrested Development | Comedy    |    8.4 |
| Arrested Development | Comedy    |    9.9 |
| Bob's Burgers        | Animation |    7.0 |
```

```sql
SELECT
    title,
    genre,
    rating
FROM series
INNER JOIN reviews
    ON series.id = reviews.series_id
GROUP BY genre;
```

(124 Bytes) 112:1 SQL Spaces: 4

```
+----------------------+-----------+--------+
| title                | genre     | rating |
+----------------------+-----------+--------+
| Archer               | Animation |    8.0 |
| Arrested Development | Comedy    |    8.1 |
| Breaking Bad         | Drama     |    9.5 |
+----------------------+-----------+--------+
3 rows in set (0.00 sec)
```

```sql
SELECT
    genre,
    AVG(rating)
FROM series
INNER JOIN reviews
    ON series.id = reviews.series_id
GROUP BY genre;
```

```
+-----------+-------------+
| genre     | AVG(rating) |
+-----------+-------------+
| Animation |     7.86000 |
| Comedy    |     8.16250 |
| Drama     |     8.04375 |
+-----------+-------------+
3 rows in set (0.00 sec)
```

```sql
SELECT
    genre,
    AVG(rating) AS avg_rating
FROM series
INNER JOIN reviews
    ON series.id = reviews.series_id
GROUP BY genre;
```

```
+-----------+------------+
| genre     | avg_rating |
+-----------+------------+
| Animation |    7.86000 |
| Comedy    |    8.16250 |
| Drama     |    8.04375 |
+-----------+------------+
3 rows in set (0.00 sec)
```

```sql
SELECT
    genre,
    ROUND(AVG(rating),2) AS avg_rating
FROM series
INNER JOIN reviews
    ON series.id = reviews.series_id
GROUP BY genre;
```

like.sql
problems.sql

genre	avg_rating
Animation	7.86
Comedy	8.16
Drama	8.04

3 rows in set (0.01 sec)

first_name	last_name	COUNT	MIN	MAX	AVG	STATUS
Thomas	Stoneman	5	7.0	9.5	8.02000	ACTIVE
Wyatt	Skaggs	9	5.5	9.3	7.80000	ACTIVE
Kimbra	Masters	9	6.8	9.0	7.98889	ACTIVE
Domingo	Cortes	10	5.8	9.1	7.83000	ACTIVE
Colt	Steele	10	4.5	9.9	8.77000	ACTIVE
Pinkie	Petit	4	4.3	8.8	7.25000	ACTIVE
Marlon	Crafford	0	0.0	0.0	0.00000	INACTIVE

```
SELECT *
FROM reviewers;
```

id	first_name	last_name
1	Thomas	Stoneman
2	Wyatt	Skaggs
3	Kimbra	Masters
4	Domingo	Cortes
5	Colt	Steele
6	Pinkie	Petit
7	Marlon	Crafford

```
SELECT *
FROM reviewers
JOIN reviews
    ON reviewers.id = reviews.reviewer_id;
```

id	first_name	last_name	id	rating	series_id	reviewer_id
1	Thomas	Stoneman	1	8.0	1	1
1	Thomas	Stoneman	6	8.1	2	1
1	Thomas	Stoneman	11	7.0	3	1
1	Thomas	Stoneman	16	7.5	4	1
1	Thomas	Stoneman	21	9.5	5	1
2	Wyatt	Skaggs	2	7.5	1	2
2	Wyatt	Skaggs	19	7.6	4	2
2	Wyatt	Skaggs	24	9.3	5	2
2	Wyatt	Skaggs	26	6.5	6	2
2	Wyatt	Skaggs	29	8.4	6	2
2	Wyatt	Skaggs	31	9.1	7	2

```
SELECT *
FROM reviewers
LEFT JOIN reviews
    ON reviewers.id = reviews.reviewer_id;
```

5	Colt	Steele	25	9.9	5	5
5	Colt	Steele	30	9.1	6	5
5	Colt	Steele	32	9.7	7	5
5	Colt	Steele	36	9.3	8	5
5	Colt	Steele	41	4.5	9	5
5	Colt	Steele	42	9.9	10	5
6	Pinkie	Petit	9	8.4	2	6
6	Pinkie	Petit	12	7.5	3	6
6	Pinkie	Petit	35	8.8	8	6
6	Pinkie	Petit	40	4.3	9	6
7	Marlon	Crafford	NULL	NULL	NULL	NULL

48 rows in set (0.00 sec)

```
SELECT
    first_name,
    last_name,
    rating
FROM reviewers
LEFT JOIN reviews
    ON reviewers.id = reviews.reviewer_id;
    -> ON reviewers.id = reviews.reviewer_id;
```

first_name	last_name	rating
Thomas	Stoneman	8.0
Thomas	Stoneman	8.1
Thomas	Stoneman	7.0
Thomas	Stoneman	7.5
Thomas	Stoneman	9.5
Wyatt	Skaggs	7.5
Wyatt	Skaggs	7.6

```
SELECT
    first_name,
    last_name,
    rating
FROM reviewers
LEFT JOIN reviews
    ON reviewers.id = reviews.reviewer_id
GROUP BY reviewers.id;
```

```
| first_name | last_name | rating |
+------------+-----------+--------+
| Thomas     | Stoneman  |    8.0 |
| Wyatt      | Skaggs    |    7.5 |
| Kimbra     | Masters   |    8.5 |
| Domingo    | Cortes    |    7.7 |
| Colt       | Steele    |    8.9 |
| Pinkie     | Petit     |    8.4 |
| Marlon     | Crafford  |   NULL |
+------------+-----------+--------+
7 rows in set (0.01 sec)
```

```
SELECT
    first_name,
    last_name,
    COUNT(rating)
FROM reviewers
LEFT JOIN reviews
    ON reviewers.id = reviews.reviewer_id
GROUP BY reviewers.id;
```

```
| first_name | last_name | COUNT(rating) |
+------------+-----------+---------------+
| Thomas     | Stoneman  |             5 |
| Wyatt      | Skaggs    |             9 |
| Kimbra     | Masters   |             9 |
| Domingo    | Cortes    |            10 |
| Colt       | Steele    |            10 |
| Pinkie     | Petit     |             4 |
| Marlon     | Crafford  |             0 |
+------------+-----------+---------------+
7 rows in set (0.00 sec)
```

```
SELECT
    first_name,
    last_name,
    COUNT(rating),
    MIN(rating)
FROM reviewers
LEFT JOIN reviews
    ON reviewers.id = reviews.reviewer_id
GROUP BY reviewers.id;
```

```
| first_name | last_name | COUNT(rating) | MIN(rating) |
+------------+-----------+---------------+-------------+
| Thomas     | Stoneman  |             5 |         7.0 |
| Wyatt      | Skaggs    |             9 |         5.5 |
| Kimbra     | Masters   |             9 |         6.8 |
| Domingo    | Cortes    |            10 |         5.8 |
| Colt       | Steele    |            10 |         4.5 |
| Pinkie     | Petit     |             4 |         4.3 |
| Marlon     | Crafford  |             0 |        NULL |
+------------+-----------+---------------+-------------+
```

```
    first_name,
    last_name,
    COUNT(rating) AS COUNT,
    IFNULL(MIN(rating), 0) AS MIN,
    IFNULL(MAX(rating), 0) AS MAX
FROM reviewers
LEFT JOIN reviews
```

```
| first_name | last_name | COUNT | MIN | MAX |
+------------+-----------+-------+-----+-----+
| Thomas     | Stoneman  |     5 | 7.0 | 9.5 |
| Wyatt      | Skaggs    |     9 | 5.5 | 9.3 |
| Kimbra     | Masters   |     9 | 6.8 | 9.0 |
| Domingo    | Cortes    |    10 | 5.8 | 9.1 |
| Colt       | Steele    |    10 | 4.5 | 9.9 |
| Pinkie     | Petit     |     4 | 4.3 | 8.8 |
| Marlon     | Crafford  |     0 | 0.0 | 0.0 |
+------------+-----------+-------+-----+-----+
7 rows in set (0.00 sec)
```

```
    first_name,
    last_name,
    COUNT(rating) AS COUNT,
    IFNULL(MIN(rating), 0) AS MIN,
    IFNULL(MAX(rating), 0) AS MAX,
    IFNULL(AVG(rating), 0) AS AVG
FROM reviewers
LEFT JOIN reviews
```

```
| first_name | last_name | COUNT | MIN | MAX | AVG     |
+------------+-----------+-------+-----+-----+---------+
| Thomas     | Stoneman  |     5 | 7.0 | 9.5 | 8.02000 |
| Wyatt      | Skaggs    |     9 | 5.5 | 9.3 | 7.80000 |
| Kimbra     | Masters   |     9 | 6.8 | 9.0 | 7.98889 |
| Domingo    | Cortes    |    10 | 5.8 | 9.1 | 7.83000 |
| Colt       | Steele    |    10 | 4.5 | 9.9 | 8.77000 |
| Pinkie     | Petit     |     4 | 4.3 | 8.8 | 7.25000 |
| Marlon     | Crafford  |     0 | 0.0 | 0.0 | 0.00000 |
```

```
    CASE
        WHEN COUNT(rating) >= 1 THEN 'ACTIVE'
        ELSE 'INACTIVE'
    END AS STATUS
```

```
| first_name | last_name | COUNT | MIN | MAX | AVG     | STATUS   |
+------------+-----------+-------+-----+-----+---------+----------+
| Thomas     | Stoneman  |     5 | 7.0 | 9.5 | 8.02000 | ACTIVE   |
| Wyatt      | Skaggs    |     9 | 5.5 | 9.3 | 7.80000 | ACTIVE   |
| Kimbra     | Masters   |     9 | 6.8 | 9.0 | 7.98889 | ACTIVE   |
| Domingo    | Cortes    |    10 | 5.8 | 9.1 | 7.83000 | ACTIVE   |
| Colt       | Steele    |    10 | 4.5 | 9.9 | 8.77000 | ACTIVE   |
| Pinkie     | Petit     |     4 | 4.3 | 8.8 | 7.25000 | ACTIVE   |
| Marlon     | Crafford  |     0 | 0.0 | 0.0 | 0.00000 | INACTIVE |
```

```
132     IF(COUNT(rating) >= 1, 'ACTIVE', 'INACTIVE') AS STATUS
```

```
| first_name | last_name | COUNT | MIN | MAX | AVG  | STATUS   |
+------------+-----------+-------+-----+-----+------+----------+
| Thomas     | Stoneman  |     5 | 7.0 | 9.5 | 8.02 | ACTIVE   |
| Wyatt      | Skaggs    |     9 | 5.5 | 9.3 | 7.80 | ACTIVE   |
| Kimbra     | Masters   |     9 | 6.8 | 9.0 | 7.99 | ACTIVE   |
| Domingo    | Cortes    |    10 | 5.8 | 9.1 | 7.83 | ACTIVE   |
| Colt       | Steele    |    10 | 4.5 | 9.9 | 8.77 | ACTIVE   |
| Pinkie     | Petit     |     4 | 4.3 | 8.8 | 7.25 | ACTIVE   |
| Marlon     | Crafford  |     0 | 0.0 | 0.0 | 0.00 | INACTIVE |
```

```
132     CASE
133         WHEN COUNT(rating) >= 10 THEN 'POWER USER'
134         WHEN COUNT(rating) > 0 THEN 'ACTIVE'
135         ELSE 'INACTIVE'
136     END AS STATUS
```

134:38 SQL Spaces: 4

```
| first_name | last_name | COUNT | MIN | MAX | AVG  | STATUS     |
+------------+-----------+-------+-----+-----+------+------------+
| Thomas     | Stoneman  |     5 | 7.0 | 9.5 | 8.02 | ACTIVE     |
| Wyatt      | Skaggs    |     9 | 5.5 | 9.3 | 7.80 | ACTIVE     |
| Kimbra     | Masters   |     9 | 6.8 | 9.0 | 7.99 | ACTIVE     |
| Domingo    | Cortes    |    10 | 5.8 | 9.1 | 7.83 | POWER USER |
| Colt       | Steele    |    10 | 4.5 | 9.9 | 8.77 | POWER USER |
| Pinkie     | Petit     |     4 | 4.3 | 8.8 | 7.25 | ACTIVE     |
| Marlon     | Crafford  |     0 | 0.0 | 0.0 | 0.00 | INACTIVE   |
```

```
| title                  | rating | reviewer         |
+------------------------+--------+------------------+
| Archer                 |    8.0 | Thomas Stoneman  |
| Archer                 |    7.7 | Domingo Cortes   |
| Archer                 |    8.5 | Kimbra Masters   |
| Archer                 |    7.5 | Wyatt Skaggs     |
| Archer                 |    8.9 | Colt Steele      |
| Arrested Development   |    8.4 | Pinkie Petit     |
| Arrested Development   |    9.9 | Colt Steele      |
| Arrested Development   |    8.1 | Thomas Stoneman  |
| Arrested Development   |    6.0 | Domingo Cortes   |
| Arrested Development   |    8.0 | Kimbra Masters   |
| Bob's Burgers          |    7.0 | Thomas Stoneman  |
| Bob's Burgers          |    8.0 | Domingo Cortes   |
| Bob's Burgers          |    7.1 | Kimbra Masters   |
| Bob's Burgers          |    7.5 | Pinkie Petit     |
| Bob's Burgers          |    8.0 | Colt Steele      |
```

```
SELECT * FROM reviewers;
```

```
| id | first_name | last_name |
+----+------------+-----------+
|  1 | Thomas     | Stoneman  |
|  2 | Wyatt      | Skaggs    |
|  3 | Kimbra     | Masters   |
|  4 | Domingo    | Cortes    |
|  5 | Colt       | Steele    |
|  6 | Pinkie     | Petit     |
|  7 | Marlon     | Crafford  |
+----+------------+-----------+
7 rows in set (0.00 sec)
```

```
SELECT * FROM reviewers
JOIN reviews
    ON reviewers.id = reviews.reviewer_id;
```

```
| id | first_name | last_name | id | rating | series_id | reviewer_id |
+----+------------+-----------+----+--------+-----------+-------------+
|  1 | Thomas     | Stoneman  |  1 |    8.0 |         1 |           1 |
|  1 | Thomas     | Stoneman  |  6 |    8.1 |         2 |           1 |
|  1 | Thomas     | Stoneman  | 11 |    7.0 |         3 |           1 |
|  1 | Thomas     | Stoneman  | 16 |    7.5 |         4 |           1 |
|  1 | Thomas     | Stoneman  | 21 |    9.5 |         5 |           1 |
|  2 | Wyatt      | Skaggs    |  2 |    7.5 |         1 |           2 |
|  2 | Wyatt      | Skaggs    | 19 |    7.6 |         4 |           2 |
|  2 | Wyatt      | Skaggs    | 24 |    9.3 |         5 |           2 |
|  2 | Wyatt      | Skaggs    | 26 |    6.5 |         6 |           2 |
|  2 | Wyatt      | Skaggs    | 29 |    8.4 |         6 |           2 |
```

```
SELECT * FROM reviewers
INNER JOIN reviews
    ON reviewers.id = reviews.reviewer_id
INNER JOIN series
    ON series.id = reviews.series_id;
```

```
| id | first_name | last_name | id | rating | series_id | reviewer_id | id | title
        | released_year | genre     |
+----+------------+-----------+----+--------+-----------+-------------+----+--------------
--------+---------------+-----------+
|  1 | Thomas     | Stoneman  |  1 |    8.0 |         1 |           1 |  1 | Archer
        |          2009 | Animation |
|  1 | Thomas     | Stoneman  |  6 |    8.1 |         2 |           1 |  2 | Arrested Deve
lopment |          2003 | Comedy    |
|  1 | Thomas     | Stoneman  | 11 |    7.0 |         3 |           1 |  3 | Bob's Burgers
        |          2011 | Animation |
|  1 | Thomas     | Stoneman  | 16 |    7.5 |         4 |           1 |  4 | Bojack Horsem
an      |          2014 | Animation |
|  1 | Thomas     | Stoneman  | 21 |    9.5 |         5 |           1 |  5 | Breaking Bad
```

```
SELECT
    title,
    rating,
    first_name,
    last_name
FROM reviewers
INNER JOIN reviews
    ON reviewers.id = reviews.reviewer_id
```

```
| title                | rating | first_name | last_name |
+----------------------+--------+------------+-----------+
| Archer               |    8.0 | Thomas     | Stoneman  |
| Arrested Development |    8.1 | Thomas     | Stoneman  |
| Bob's Burgers        |    7.0 | Thomas     | Stoneman  |
| Bojack Horseman      |    7.5 | Thomas     | Stoneman  |
| Breaking Bad         |    9.5 | Thomas     | Stoneman  |
| Archer               |    7.5 | Wyatt      | Skaggs    |
```

```
    title,
    rating,
    CONCAT(first_name,' ', last_name) AS reviewer
FROM reviewers
INNER JOIN reviews
    ON reviewers.id = reviews.reviewer_id
INNER JOIN series
```

```
| title                | rating | reviewer        |
+----------------------+--------+-----------------+
| Archer               |    8.0 | Thomas Stoneman |
| Arrested Development |    8.1 | Thomas Stoneman |
| Bob's Burgers        |    7.0 | Thomas Stoneman |
| Bojack Horseman      |    7.5 | Thomas Stoneman |
| Breaking Bad         |    9.5 | Thomas Stoneman |
| Archer               |    7.5 | Wyatt Skaggs    |
| Bojack Horseman      |    7.6 | Wyatt Skaggs    |
| Breaking Bad         |    9.3 | Wyatt Skaggs    |
| Curb Your Enthusiasm |    6.5 | Wyatt Skaggs    |
| Curb Your Enthusiasm |    8.4 | Wyatt Skaggs    |
```

```
FROM reviewers
INNER JOIN reviews
    ON reviewers.id = reviews.reviewer_id
INNER JOIN series
    ON series.id = reviews.series_id
ORDER BY title;
```

```
| title                | rating | reviewer        |
+----------------------+--------+-----------------+
| Archer               |    8.0 | Thomas Stoneman |
| Archer               |    7.7 | Domingo Cortes  |
| Archer               |    8.5 | Kimbra Masters  |
| Archer               |    7.5 | Wyatt Skaggs    |
| Archer               |    8.9 | Colt Steele     |
| Arrested Development |    8.1 | Thomas Stoneman |
| Arrested Development |    6.0 | Domingo Cortes  |
| Arrested Development |    8.0 | Kimbra Masters  |
| Arrested Development |    8.4 | Pinkie Petit    |
| Arrested Development |    9.9 | Colt Steele     |
```