Id	Title	Director	Year	Length_minutes
1	Toy Story	John Lasseter	1995	81
2	A Bug's Life	John Lasseter	1998	95
3	Toy Story 2	John Lasseter	1999	93
4	Monsters, Inc.	Pete Docter	2001	92
5	Finding Nemo	Andrew Stanton	2003	107
6	The Incredibles	Brad Bird	2004	116
7	Cars	John Lasseter	2006	117
8	Ratatouille	Brad Bird	2007	115
9	WALL-E	Andrew Stanton	2008	104
10	Up	Pete Docter	2009	101

```
SELECT *  FROM movies;
```

RESET

Exercise 1 — Tasks

1. Find the `title` of each film ✓
2. Find the `director` of each film ✓
3. Find the `title` and `director` of each film ✓
4. Find the `title` and `year` of each film ✓
5. Find `all` the information about each film ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Next – SQL Lesson 2: Queries with constraints (Pt. 1)
Previous – Introduction to SQL

Table: Movies

Id	Title	Director	Year	Length_minutes
1	Toy Story	John Lasseter	1995	81
2	A Bug's Life	John Lasseter	1998	95
3	Toy Story 2	John Lasseter	1999	93
4	Monsters, Inc.	Pete Docter	2001	92
5	Finding Nemo	Andrew Stanton	2003	107

```
SELECT * FROM movies where id BETWEEN 1 AND 5
```

RESET

Exercise 2 — Tasks

1. Find the movie with a row **id** of 6 ✓
2. Find the movies released in the **year**s between 2000 and 2010 ✓
3. Find the movies **not** released in the **year**s between 2000 and 2010 ✓
4. Find the first 5 Pixar movies and their release **year** ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Table: Movies

Id	Title	Director	Year	Length_minutes
9	WALL-E	Andrew Stanton	2008	104
87	WALL-G	Brenda Chapman	2042	97

```
SELECT * FROM movies where Title   LIKE "%WALL-%"
```

RESET

Exercise 3 — Tasks

1. Find all the Toy Story movies ✓
2. Find all the movies directed by John Lasseter ✓
3. Find all the movies (and director) not directed by John Lasseter ✓
4. Find all the WALL-* movies ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Table: Movies

Id	Title	Director	Year	Length_minutes
2	Monsters University	Dan Scanlon	2013	110
9	Monsters, Inc.	Pete Docter	2001	92
5	Ratatouille	Brad Bird	2007	115
4	The Incredibles	Brad Bird	2004	116
14	Toy Story	John Lasseter	1995	81

```
select
* from movies order by title limit 5 OFFSET 5
```

RESET

Exercise 4 — Tasks

1. List all directors of Pixar movies (alphabetically), without duplicates ✓
2. List the last four Pixar movies released (ordered from most recent to least) ✓
3. List the **first** five Pixar movies sorted alphabetically ✓
4. List the **next** five Pixar movies sorted alphabetically ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

lesson to learn about queries that span multiple tables.

Table: North_american_cities

City	Population
Chicago	2718782
Houston	2195914

```
SELECT city, population FROM north_american_cities where country like
    "%United States%" order by population desc limit 2 offset 2
```

Review 1 — Tasks

1. List all the Canadian cities and their populations ✓
2. Order all the cities in the United States by their latitude from north to south ✓
3. List all the cities west of Chicago, ordered from west to east ✓
4. List the two largest cities in Mexico (by population) ✓
5. List the third and fourth largest cities (by population) in the United States and their population ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

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Movie_id	Rating	Domestic_sales	International_sales	Id	Title	Director	Year	Length_minu
9	8.5	223808164	297503696	9	WALL-E	Andrew Stanton	2008	104
11	8.4	415004880	648167031	11	Toy Story 3	Lee Unkrich	2010	103
1	8.3	191796233	170162503	1	Toy Story	John Lasseter	1995	81
10	8.3	293004164	438338580	10	Up	Pete Docter	2009	101
5	8.2	380843261	555900000	5	Finding Nemo	Andrew Stanton	2003	107
4	8.1	289916256	272900000	4	Monsters,	Pete	2001	92

```
SELECT * FROM Boxoffice
INNER JOIN Movies
    ON Movies .Id = Boxoffice.Movie_id order by rating desc
```

RESET

Exercise 6 — Tasks

1. Find the domestic and international sales for each movie ✓
2. Show the sales numbers for each movie that did better internationally rather than domestically ✓
3. List all the movies by their ratings in descending order ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Next – SQL Lesson 7: OUTER JOINs
Previous – SQL Review: Simple SELECT Queries

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Query Results

Building_name	Role
1e	Engineer
1e	Manager
1w	
2e	
2w	Artist
2w	Manager

```
SELECT distinct Building_name, role FROM  Buildings  left join Employees on
    Buildings .Building_name=Employees .Building
```

RESET

Exercise 7 — Tasks

1. Find the list of all buildings that have employees ✓
2. Find the list of all buildings and their capacity ✓
3. List all buildings and the distinct employee roles in each building (including empty buildings) ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Search

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Query Results

Building_name	Capacity	Role	Name	Building	Years_employed
1w	32				
2e	16				

```
SELECT * from Buildings left join Employees on Buildings.Building_name =
    Employees .Building where Years_employed is null
```

RESET

Exercise 8 — Tasks

1. Find the name and role of all employees who have not been assigned to a building ✓
2. Find the names of the buildings that hold no employees ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Search

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17:07
23-02-2024

Query Results

Title	Year
The Incredibles	2004
WALL-E	2008
Toy Story 3	2010
Cars	2006
A Bug's Life	1998
Brave	2012

```
SELECT title, year
FROM movies
inner join Boxoffice on movies.id = Boxoffice.Movie_id
where year%2=0;
```

RESET

Exercise 9 — Tasks

1. List all movies and their combined sales in **millions** of dollars ✓
2. List all movies and their ratings **in percent** ✓
3. List all movies that were released on even number years ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Building	Sum(Years_employed)
1e	29
2w	36

```
SELECT Building,sum(Years_employed) FROM employees group by building
```

RESET

Exercise 10 — Tasks

1. Find the longest time that an employee has been at the studio ✓
2. For each role, find the average number of years employed by employees in that role ✓
3. Find the total number of employee years worked in each building ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Next – SQL Lesson 11: Queries with aggregates (Pt. 2)
Previous – SQL Lesson 9: Queries with expressions

Table: Employees

Role	Number_of_Artists
Engineer	17

```
SELECT  role, sum(years_employed) as number_of_Artists FROM employees
group by role HAVING role="Engineer"
```

RESET

Exercise 11 — Tasks

1. Find the number of Artists in the studio (without a **HAVING** clause) ✓
2. Find the number of Employees of each role in the studio ✓
3. Find the total number of years employed by all Engineers ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Query Results

Director	Director_movies
Andrew Stanton	1458055121
Brad Bird	1255164910
Brenda Chapman	538983207
Dan Scanlon	743559607
John Lasseter	2232208025
Lee Unkrich	1063171911
Pete Docter	1294159000

```
SELECT director, sum(International_sales+Domestic_sales) as director_movies
FROM movies inner join Boxoffice
on Movies .id= Boxoffice.Movie_id
group by director;
```

RESET

Exercise 12 — Tasks

1. Find the number of movies each director has directed ✓
2. Find the total domestic and international sales that can be attributed to each director ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Query Results

Movie_id	Rating	Domestic_sales	International_sales
3	7.9	245852179	239163000
1	8.3	191796233	170162503
2	7.2	162798565	200600000
4	8.7	340000000	270000000

```
INSERT INTO Boxoffice
VALUES (4, "8.7",340000000,270000000)
```

RUN QUERY RESET

Exercise 13 — Tasks

1. Add the studio's new production, **Toy Story 4** to the list of movies (you can use any director) ✓
2. Toy Story 4 has been released to critical acclaim! It had a rating of **8.7**, and made **340 million domestically** and **270 million internationally**. Add the record to the `BoxOffice` table. ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Table: Movies

4	Monsters, Inc.	Pete Docter	2001	92
5	Finding Nemo	Andrew Stanton	2003	107
6	The Incredibles	Brad Bird	2004	116
7	Cars	John Lasseter	2006	117
8	Ratatouille	Brad Bird	2007	115
9	WALL-E	Andrew Stanton	2008	104
10	Up	Pete Docter	2009	101
11	Toy Story 3	Lee Unkrich	2010	103
12	Cars 2	John Lasseter	2011	120
13	Brave	Brenda Chapman	2012	102
14	Monsters University	Dan Scanlon	2013	110

```
UPDATE Movies
SET director = "Lee Unkrich",
title="Toy Story 3"
   where title="Toy Story 8"
```

RUN QUERY RESET

Exercise 14 — Tasks

1. The director for A Bug's Life is incorrect, it was actually directed by **John Lasseter** ✓
2. The year that Toy Story 2 was released is incorrect, it was actually released in **1999** ✓
3. Both the title and director for Toy Story 8 is incorrect! The title should be "Toy Story 3" and it was directed by **Lee Unkrich** ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Id	Title	Director	Year	Length_minutes
7	Cars	John Lasseter	2006	117
8	Ratatouille	Brad Bird	2007	115
10	Up	Pete Docter	2009	101
11	Toy Story 3	Lee Unkrich	2010	103
12	Cars 2	John Lasseter	2011	120
13	Brave	Brenda Chapman	2012	102
14	Monsters University	Dan Scanlon	2013	110

```
DELETE FROM Movies
WHERE Director="Andrew Stanton";
```

RUN QUERY RESET

Exercise 15 — Tasks

1. This database is getting too big, lets remove all movies that were released **before** 2005. ✓
2. Andrew Stanton has also left the studio, so please remove all movies directed by him. ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Next – SQL Lesson 16: Creating tables
Previous – SQL Lesson 14: Updating rows

Table: Database

Name	Version	Download_count
SQLite	3.9	92000000
MySQL	5.5	512000000
Postgres	9.4	384000000

```
CREATE TABLE Database (
name text,
version float,
download_count integer
);
```

RUN QUERY RESET

Exercise 16 — Tasks

1. Create a new table named **`Database`** with the following columns:
   – **`Name`** A string (text) describing the name of the database
   – **`Version`** A number (floating point) of the latest version of this database
   – **`Download_count`** An integer count of the number of times this database was downloaded

This table has no constraints. ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Table: Movies

Id	Title	Director	Year	Length_minutes	Aspect_ratio	Language
1	Toy Story	John Lasseter	1995	81	16	English
2	A Bug's Life	John Lasseter	1998	95	16	English
3	Toy Story 2	John Lasseter	1999	93	16	English
4	Monsters, Inc.	Pete Docter	2001	92	16	English
5	Finding Nemo	Andrew Stanton	2003	107	16	English
6	The Incredibles	Brad Bird	2004	116	16	English
7	Cars	John Lasseter	2006	117	16	English
8	Ratatouille	Brad Bird	2007	115	16	English
9	WALL-E	Andrew Stanton	2008	104	16	English
10	Up	Pete Docter	2009	101	16	English

```
ALTER TABLE Movies
ADD Language  TEXT
    DEFAULT English;
```

RUN QUERY RESET

Exercise 17 — Tasks

1. Add a column named **Aspect_ratio** with a **FLOAT** data type to store the aspect-ratio each movie was released in. ✓
2. Add another column named **Language** with a **TEXT** data type to store the language that the movie was released in. Ensure that the default for this language is **English**. ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

Query Results

Id	Title	Director	Year	Length_minutes

```
DROP TABLE IF EXISTS BoxOffice ;
```

RUN QUERY RESET

Exercise 18 — Tasks

1. We've sadly reached the end of our lessons, lets clean up by removing the **Movies** table ✓
2. And drop the **BoxOffice** table as well ✓

Stuck? Read this task's Solution.
Solve all tasks to continue to the next lesson.

Continue ›

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