

Table: Movies

Title
Toy Story
A Bug's Life
Toy Story 2
Monsters, Inc.
Finding Nemo
The Incredibles
Cars
Ratatouille
WALL-E
Up

```
SELECT title FROM movies;
```

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.

Finish above Tasks

Table: Movies

Pete Docter
Andrew Stanton
Brad Bird
John Lasseter
Brad Bird
Andrew Stanton
Pete Docter
Lee Unkrich
John Lasseter
Brenda Chapman
Dan Scanlon

```
SELECT director 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.

Finish above Tasks

Table: Movies

Monsters, Inc.	Pete Docter
Finding Nemo	Andrew Stanton
The Incredibles	Brad Bird
Cars	John Lasseter
Ratatouille	Brad Bird
WALL-E	Andrew Stanton
Up	Pete Docter
Toy Story 3	Lee Unkrich
Cars 2	John Lasseter
Brave	Brenda Chapman
Monsters University	Dan Scanlon

```
SELECT title,director FROM movies;
```

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.

Table: Movies

Monsters, Inc.	2001
Finding Nemo	2003
The Incredibles	2004
Cars	2006
Ratatouille	2007
WALL-E	2008
Up	2009
Toy Story 3	2010
Cars 2	2011
Brave	2012
Monsters University	2013

```
SELECT title,year FROM movies;
```

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.

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

```
SELECT * FROM movies;
```

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 >](#)

RESET

Table: Movies

Id	Title	Director	Year	Length_minutes
6	The Incredibles	Brad Bird	2004	116

```
SELECT * FROM movies where id="6";
```

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.

[Finish above Tasks](#)

RESET

Table: Movies

Id	Title	Director	Year	Length_minutes
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

```
SELECT * FROM movies where year between 2000 and 2010;
```

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.

Finish above Tasks

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
12	Cars 2	John Lasseter	2011	120
13	Brave	Brenda Chapman	2012	102
14	Monsters University	Dan Scanlon	2013	110

```
SELECT * FROM movies where year not between 2000 and 2010;
```

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.

Finish above Tasks

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<=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
1	Toy Story	John Lasseter	1995	81
3	Toy Story 2	John Lasseter	1999	93
11	Toy Story 3	Lee Unkrich	2010	103

```
SELECT * FROM movies where Title like "Toy Story%";
```

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.

Finish above Tasks

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
7	Cars	John Lasseter	2006	117
12	Cars 2	John Lasseter	2011	120

```
SELECT * FROM movies where Director="John Lasseter";
```

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.

Finish above Tasks

Table: Movies

Id	Title	Director	Year	Length_minutes
4	Monsters, Inc.	Pete Docter	2001	92
5	Finding Nemo	Andrew Stanton	2003	107
6	The Incredibles	Brad Bird	2004	116
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
13	Brave	Brenda Chapman	2012	102
14	Monsters University	Dan Scanlon	2013	110
87	WALL-G	Brenda Chapman	2042	97

```
SELECT * FROM movies where Director!="John Lasseter";
```

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.

Finish above Tasks

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

Director
Andrew Stanton
Brad Bird
Brenda Chapman
Dan Scanlon
John Lasseter
Lee Unkrich
Pete Docter

```
SELECT DISTINCT director FROM movies  
ORDER BY director ;
```

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.

Finish above Tasks

Table: Movies

Id	Title	Director	Year	Length_minutes
8	Monsters University	Dan Scanlon	2013	110
14	Brave	Brenda Chapman	2012	102
11	Cars 2	John Lasseter	2011	120
9	Toy Story 3	Lee Unkrich	2010	103

```
SELECT * FROM movies  
ORDER BY Year Desc limit 4 ;
```

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.

Finish above Tasks

Table: Movies

Title
A Bug's Life
Brave
Cars
Cars 2
Finding Nemo

```
SELECT Title FROM movies ORDER BY Title LIMIT 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.

Finish above Tasks

Table: Movies

Title
Monsters University
Monsters, Inc.
Ratatouille
The Incredibles
Toy Story

```
SELECT Title 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 ›

Table: North_american_cities

City	Population
Toronto	2795060
Montreal	1717767

```
SELECT City,Population FROM north_american_cities where Country="Canada";
```

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.

Finish above Tasks

Table: North_american_cities

City	Country	Population	Latitude	Longitude
Chicago	United States	2718782	41.878114	-87.629798
New York	United States	8405837	40.712784	-74.005941
Philadelphia	United States	1553165	39.952584	-75.165222
Los Angeles	United States	3884307	34.052234	-118.243685
Phoenix	United States	1513367	33.448377	-112.074037
Houston	United States	2195914	29.760427	-95.369803

```
SELECT * FROM north_american_cities where Country like "united States" order
by latitude DESC ;
```

RESET

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.

Finish above Tasks

Table: North_american_cities

City	Longitude
Toronto	-79.383184
New York	-74.005941
Philadelphia	-75.165222
Havana	-82.345189
Montreal	-73.567256
Chicago	-87.629798

```
SELECT City,Longitude FROM north_american_cities where
Longitude>=-87.629798;
```

RESET

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.

Finish above Tasks

Table: North_american_cities

City	Country	Population	Latitude	Longitude
Los Angeles	United States	3884307	34.052234	-118.243685
Phoenix	United States	1513367	33.448377	-112.074037
Guadalajara	Mexico	1500800	20.659699	-103.349609
Mexico City	Mexico	8555500	19.432608	-99.133208
Ecatepec de Morelos	Mexico	1742000	19.601841	-99.050674
Houston	United States	2195914	29.760427	-95.369803

```
SELECT * FROM north_american_cities where longitude <
(SELECT Longitude from north_american_cities where City="Chicago")
order by Longitude;
```

RESET

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.

Finish above Tasks

Table: North_american_cities

City	Population
Mexico City	8555500
Ecatepec de Morelos	1742000

```
SELECT city,Population FROM north_american_cities where Country="Mexico"
order by Population Desc limit 2;
```

RESET

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.

Finish above 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 ✓

Continue ›

Find CQI Belt useful? Please consider

Title	Domestic_sales	International_sales
Finding Nemo	380843261	555900000
Monsters University	268492764	475066843
Ratatouille	206445654	417277164
Cars 2	191452396	368400000
Toy Story 2	245852179	239163000
The Incredibles	261441092	370001000
WALL-E	223808164	297503696
Toy Story 3	415004880	648167031
Toy Story	191796233	170162503
Cars	244082982	217900167

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

id	Title	Director	Year	Length_minutes	Movie_id	Rating	Domestic_sales	International_sales
5	Finding Nemo	Andrew Stanton	2003	107	5	8.2	380843261	555900000
4	Monsters University	Dan Scanlon	2013	110	14	7.4	268492764	475066843
3	Ratatouille	Brad Bird	2007	115	8	8	206445654	417277164
2	Cars 2	John Lasseter	2011	120	12	6.4	191452396	368400000
5	The Incredibles	Brad Bird	2004	116	6	8	261441092	370001000
9	WALL-E	Andrew Stanton	2008	104	9	8.5	223808164	297503696

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

Query Results

Title	Rating
WALL-E	8.5
Toy Story 3	8.4
Toy Story	8.3
Up	8.3
Finding Nemo	8.2
Monsters, Inc.	8.1
Ratatouille	8
The Incredibles	8
Toy Story 2	7.9
Monsters University	7.4

```
SELECT Title,Rating
from movies
INNER JOIN Boxoffice
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 ›

Query Results

Building_name	Building
1e	1e
2w	2w

```
SELECT Distinct Building_name ,Building
FROM Buildings
inner join employees
on Building_name=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.

Finish above Tasks

Query Results

Building_name	Capacity
1e	24
1w	32
2e	16
2w	20

```
SELECT Building_name ,Capacity
FROM Buildings
```

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.

Finish above Tasks

Artist

Sherman D

2w

8

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 Building_name=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 ›

Artist

Sherman D

2w

8

Query Results

Name	Role
Yancy I.	Engineer
Oliver P.	Artist

```
SELECT Name,Role FROM employees where Building 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.

Finish above Tasks

Query Results

Building_name

1w

2e

```
SELECT DISTINCT building_name
FROM buildings
LEFT JOIN employees
ON building_name = building
WHERE role 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 >

Next – [SQL Lesson 9: Queries with expressions](#)
Previous – [SQL Lesson 7: OUTER JOINs](#)

Find SQLBolt useful? Please consider
[Donating \(\\$4\) via Paypal](#) to support our site.

Query Results

Title	Combined_Sales
Finding Nemo	936.743261
Monsters University	743.559607
Ratatouille	623.722818
Cars 2	559.852396
Toy Story 2	485.015179
The Incredibles	631.442092
WALL-E	521.31186
Toy Story 3	1063.171911
Toy Story	361.958736
Cars	461.983149

```
SELECT title,(Domestic_sales+International_sales)/1000000 as Combined_Sales
FROM movies
inner join Boxoffice
on id= Movie_id
```

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.

Finish above Tasks

Query Results

Title	Rating_in_Percent
Finding Nemo	82
Monsters University	74
Ratatouille	80
Cars 2	64
Toy Story 2	79
The Incredibles	80
WALL-E	85
Toy Story 3	84
Toy Story	83
Cars	72

```
SELECT title,Rating*10 as Rating_in_Percent FROM movies
inner join Boxoffice
on id= Movie_id
```

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.

Finish above Tasks

Query Results

Id	Title	Director	Year	Length_minutes
2	A Bug's Life	John Lasseter	1998	95
6	The Incredibles	Brad Bird	2004	116
7	Cars	John Lasseter	2006	117
9	WALL-E	Andrew Stanton	2008	104
11	Toy Story 3	Lee Unkrich	2010	103
13	Brave	Brenda Chapman	2012	102

```
SELECT * FROM movies 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 >

Table: Employees

MAX(Years_employed)

9

```
SELECT MAX(Years_employed) FROM employees ;
```

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.

Finish above Tasks

Table: Employees

Role	Name	Building	Years_employed	AVG(Years_employed)
Artist	Brandon J.	2w	7	6
Engineer	Malcom S.	1e	1	3.4
Manager	Daria O.	2w	6	6

```
SELECT *,AVG(Years_employed) FROM employees group by role ;
```

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.

Finish above Tasks

Table: Employees

Role	Name	Building	Years_employed	SUM(Years_employed)
Manager	Shirlee M.	1e	3	29
Manager	Daria O.	2w	6	36

```
SELECT *,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 >

Table: Employees

Role	Name	Building	Years_employed	Number_of_People
Artist	Brandon J.	2w	7	5

```
SELECT *,count(*) as Number_of_People  
FROM employees  
where Role="Artist"
```

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.

Finish above Tasks

Next – [SQL Lesson 12: Order of execution of a Query](#)
Previous – [SQL Lesson 10: Queries with aggregates \(Pt. 1\)](#)

Find SQLBolt useful? Please consider
[Donating \(\\$4\) via Paypal](#) to support our site.

Table: Employees

Role	Name	Building	Years_employed	Number_of_People
Artist	Brandon J.	2w	7	5
Engineer	Malcom S.	1e	1	5
Manager	Daria O.	2w	6	3

```
SELECT *,count(*) as Number_of_People
FROM employees
group by role;
```

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.

Finish above Tasks

Table: Employees

Role	Name	Building	Years_employed	Year
Engineer	Malcom S.	1e	1	17

```
SELECT *,Sum(Years_Employed) as year
from employees
where 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 >

Next – [SQL Lesson 12: Order of execution of a Query](#)
Previous – [SQL Lesson 10: Queries with aggregates \(Pt. 1\)](#)

Find SQLBolt useful? Please consider
[Donating \(\\$4\) via Paypal](#) to support our site.

Query Results

Id	Title	Director	Year	Length_minutes	Number_of_movies
9	WALL-E	Andrew Stanton	2008	104	2
8	Ratatouille	Brad Bird	2007	115	2
13	Brave	Brenda Chapman	2012	102	1
14	Monsters University	Dan Scanlon	2013	110	1
12	Cars 2	John Lasseter	2011	120	5
11	Toy Story 3	Lee Unkrich	2010	103	1
10	Up	Pete Docter	2009	101	2

```
select *,count(Director) as number_of_movies|from movies 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.

Finish above Tasks

Query Results

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

```
SELECT Director,sum(domestic_sales+international_sales) as total  
from movies  
inner join Boxoffice  
on id=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 >

13.insert

Query Results

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	Toy Story 4	John	2021	309

```
INSERT INTO movies
values(4,"Toy Story 4","John",2021,309)|
```

RUN QUERYRESET

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.

Finish above Tasks

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 QUERYRESET

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 (Read-Only)					Table: Boxoffice (Read-Only)			
Id	Title	Director	Year	Length_minutes	Movie_id	Rating	Domestic_sales	International_sales
1	Toy Story	John Lasseter	1995	81	3	7.9	245852179	239163000
2	A Bug's Life	John Lasseter	1998	95	1	8.3	191796233	170162503
3	Toy Story 2	John Lasseter	1999	93	2	7.2	162798565	200600000
4	Toy Story 4	John	2021	309	4	8.7	340000000	270000000

14.update

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	1899	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 where id=2;
Update movies
set Director="John Lasseter"
where
id=2
```

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.

Finish above Tasks

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
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

```
UPDATE movies
SET year=1999
WHERE id = 3;
```

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.

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
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
Row(s) updated		Pete Docter	2009	101

```
UPDATE movies
SET title="Toy Story 3",
director="Lee Unkrich"
WHERE id = 11
```

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 ›

Table: Movies

Id	Title	Director	Year	Length_minutes
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

```
DELETE FROM movies where year<2005;
```

[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.

Finish above Tasks

Table: Movies

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

Row(s) deleted

```
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 ›

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
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	
New column added		Pete Docter	2009	101	

```
ALTER table Movies  
ADD Aspect_ratio Float;
```

[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.

[Finish above Tasks](#)

Table: Movies

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

```
Alter Table movies
Add Language
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
Table dropped				

```
Drop Table movies
```

[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.

[Finish above Tasks](#)

Query Results

Id	Title	Director	Year	Length_minutes
Table dropped				

```
Drop Table 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 >](#)