

# This Exercise from sqlbolt.com

## SQL Lesson 1: SELECT queries 101

need for each task.

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 |

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

SELECT \* FROM movies;

RESET

Stuck? Read this task's [Solution](#).  
Solve all tasks to continue to the next lesson.

Finish above Tasks

Next: SQL Lesson 2: Queries with constraints (DB 1)

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### Answers :

1. SELECT title FROM movies;
2. SELECT director FROM movies;
3. SELECT title,director FROM movies;
4. SELECT title,year FROM movies;
5. SELECT \* FROM movies;

## SQL Lesson 2: Queries with constraints (Pt. 1)

Exercise

Using the right constraints, find the information we need from the **Movies** table for each task below.

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

`SELECT * FROM movies;`

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

Answers :

1. `SELECT * FROM movies where id >= 6`
2. `SELECT * FROM movies where year between 2000 and 2010`
3. `SELECT * FROM movies where year Not between 2000 and 2010`
4. `SELECT * FROM movies WHERE id <=5;`

## SQL Lesson 3: Queries with constraints (Pt. 2)

Answers :

1. `SELECT title FROM movies where title Like "Toy Story%";`

2. `SELECT title FROM movies where director= "John Lasseter";`
3. `SELECT title FROM movies where director!= "John Lasseter";`
4. `SELECT title FROM movies where title like "WALL-%";`

## SQL Lesson 4: Filtering and sorting Query results

The screenshot shows the SQLBolt website interface. At the top, there's a navigation bar with tabs for 'smajaas (Mohammed Ajaas)', 'SQLBolt - Learn SQL - SQL Le...', 'New Tab', 'Find the first 5 Pixar movies', and 'SQL query practice : 6002526'. Below the navigation bar, the URL 'sqlbolt.com/lesson/filtering\_sorting\_query\_results' is visible. The main content area features a table titled 'Table: Movies' with the following data:

| Id | Title               | Director       | Year | Length_minutes |
|----|---------------------|----------------|------|----------------|
| 1  | Up                  | Pete Docter    | 2009 | 101            |
| 2  | Ratatouille         | Brad Bird      | 2007 | 115            |
| 3  | The Incredibles     | Brad Bird      | 2004 | 116            |
| 4  | A Bug's Life        | John Lasseter  | 1998 | 95             |
| 5  | Finding Nemo        | Andrew Stanton | 2003 | 107            |
| 6  | Cars 2              | John Lasseter  | 2011 | 120            |
| 7  | WALL-E              | Andrew Stanton | 2008 | 104            |
| 8  | Monsters University | Dan Scanlon    | 2013 | 110            |
| 9  | Monsters, Inc.      | Pete Docter    | 2001 | 92             |
| 10 | Cars                | John Lasseter  | 2006 | 117            |

Below the table, there's a text input field containing the SQL query: `SELECT * FROM movies;`. To the right of the table, there's a section titled 'Exercise 4 — Tasks' with the following 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

Below the tasks, there's a link to 'Stuck? Read this task's Solution.' and a note: 'Solve all tasks to continue to the next lesson.' At the bottom of the exercise section, there's a button labeled 'Finish above Tasks'. The bottom of the page shows a footer with links to 'Next - SQL Review: Simple SELECT Queries' and 'Previous - SQL Lesson 3: Queries with constraints (Pt. 2)', along with a donation request: 'Find SQLBolt useful? Please consider Donating (\$4) via Paypal to support our site.' The Windows taskbar is visible at the very bottom, showing the search bar, taskbar icons, and system tray with the date '19-Nov-21'.

## Answers :

1. `SELECT distinct director FROM movies order by director;`
2. `SELECT DISTINCT title FROM movies ORDER BY year DESC LIMIT 4;`
3. `SELECT title FROM movies ORDER BY title LIMIT 5;`
4. `SELECT title FROM movies ORDER BY title LIMIT 5 OFFSET 5;`

## Lesson:5 SQL Review: Simple SELECT Queries

### Answers :

1. SELECT city, population FROM north\_american\_cities WHERE country = "Canada";
2. SELECT city FROM north\_american\_cities WHERE country = "United States" ORDER BY latitude DESC;
3. SELECT city FROM north\_american\_cities WHERE longitude < -87.629798 BY longitude;
4. SELECT city FROM north\_american\_cities WHERE country = "Mexico" ORDER BY population DESC LIMIT 2;
5. SELECT city FROM north\_american\_cities WHERE country = "United States" ORDER BY population DESC LIMIT 2 OFFSET 2;

## SQL Lesson 6: Multi-table queries with JOINS

table: MOVIES (Read-Only)

| 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            |

table: boxoffice (Read-Only)

| Movie_id | Rating | Domestic_sales | International_sales |
|----------|--------|----------------|---------------------|
| 5        | 8.2    | 380843261      | 555900000           |
| 14       | 7.4    | 268492764      | 475066843           |
| 8        | 8      | 206445654      | 417277164           |
| 12       | 6.4    | 191452396      | 368400000           |
| 3        | 7.9    | 245852179      | 239163000           |
| 6        | 8      | 261441092      | 370001000           |
| 9        | 8.5    | 223696414      | 207523200           |

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  | 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            |

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

## Answers :

1. `SELECT title, domestic_sales, international_sales FROM movies INNER JOIN boxoffice ON movies.id = boxoffice.movie_id;`
2. `SELECT title, domestic_sales, international_sales FROM movies INNER JOIN boxoffice ON movies.id = boxoffice.movie_id WHERE international_sales > domestic_sales;`
3. `SELECT title, rating FROM movies INNER JOIN boxoffice ON movies.id = boxoffice.movie_id ORDER BY rating DESC;`

## SQL Lesson 7: OUTER JOINS

The screenshot shows a web browser window with the URL `sqlbolt.com/lesson/select_queries_with_outer_joins`. The interface displays two tables: 'Table: Buildings (Read-Only)' and 'Table: Employees (Read-Only)'. Below these tables is a 'Query Results' section showing a list of employees with their roles, names, buildings, and years employed. To the right of the query results is a section titled 'Exercise 7 — Tasks' with three tasks listed.

**Table: Buildings (Read-Only)**

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

**Table: Employees (Read-Only)**

| Role     | Name      | Building | Years_employed |
|----------|-----------|----------|----------------|
| Engineer | Becky A.  | 1e       | 4              |
| Engineer | Dan B.    | 1e       | 2              |
| Engineer | Sharon F. | 1e       | 6              |
| Engineer | Dan M.    | 1e       | 4              |
| Engineer | Malcom S. | 1e       | 1              |
| Artist   | Tylar S.  | 2w       | 2              |

**Query Results**

| Role     | Name       | Building | Years_employed |
|----------|------------|----------|----------------|
| Engineer | Becky A.   | 1e       | 4              |
| Engineer | Dan B.     | 1e       | 2              |
| Engineer | Sharon F.  | 1e       | 6              |
| Engineer | Dan M.     | 1e       | 4              |
| Engineer | Malcom S.  | 1e       | 1              |
| Artist   | Tylar S.   | 2w       | 2              |
| Artist   | Sherman D. | 2w       | 8              |
| Artist   | Jakob J.   | 2w       | 6              |
| Artist   | Lillia A.  | 2w       | 7              |

**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)

## Answers :

1. `SELECT distinct building FROM employees;`
2. `SELECT * FROM buildings;`
3. `SELECT DISTINCT building_name, role FROM buildings LEFT JOIN employees  
ON building_name = employees.building;`