

Introduction to SQL and Databases

SQL queries

More SQL filters

SQL joins

Review: Databases and SQL

Video: Wrap-up

Reading: Glossary terms from week 4

Quiz: Weekly challenge 4

10 questions

Congratulations on completing Course 4!

● Congratulations! You passed!

Grade received: 90%
Latest Submission: 10 min
To pass 80% or higher

Go to next item

Weekly challenge 4

Review Learning Objectives

1. A security analyst queries a table related to login attempts. How can SQL help this analyst with their work? 1 / 1 point

- ☐ The analyst can use SQL to delete suspicious login attempts.
- ☒ The analyst can use SQL to filter out suspicious login attempts.
- ☐ SQL will change authentication permissions to prevent unauthorized logins.
- ☐ SQL will automatically distribute a report on suspicious login attempts.
- ☒ Correct To pass 80% or higher

Try again

2. What is true about the values in the primary key column? Select all that apply. 1 / 1 point

- ☒ They cannot be null (or empty).
- ☐ Correct
- ☐ They should never contain numeric data.
- ☒ Each row must have a unique value.
- ☐ Correct
- ☐ They do not need to be unique.

3. Which of these SQL statements queries the log_in_attempts table? Select all that apply. 1 / 1 point

- ☒ SELECT * FROM log_in_attempts;
- ☐ Correct
- ☒ SELECT event_id, username FROM log_in_attempts WHERE event_id < 150;
- ☐ Correct
- ☐ SELECT log_in_attempts FROM *;
- ☐ SELECT log_in_attempts FROM event_id;

4. What type of join compares tables and returns only the rows that have a matching value in a specified column? 1 / 1 point

- ☒ INNER JOIN
- ☐ FULL OUTER JOIN
- ☐ RIGHT JOIN
- ☐ LEFT JOIN
- ☐ Correct

5. Which SQL keyword indicates the condition for a filter? 1 / 1 point

- ☒ WHERE
- ☐ SELECT
- ☐ INNER JOIN
- ☐ FROM
- ☐ Correct

6. You work with a table that has one column for name. Some of these names have prefixes. You want to identify all of the doctors. Which query will return every name that starts with the prefix 'Dr. '? 1 / 1 point

- ☒ WHERE name LIKE 'Dr. %';
- ☐ WHERE name = 'Dr. %';
- ☐ WHERE name = 'Dr. _';
- ☐ WHERE name LIKE 'Dr. _';
- ☐ Correct

7. What does the following query return? 0 / 1 point

```
SELECT *
FROM employees
RIGHT JOIN machines ON employees.device_id = machines.device_id;
```

☐ All columns and records from the employees and machines tables

☐ All columns of the employees and machines table, all records from the employees table, and the records from machines that match on device_id

☒ All columns of the employees and machines table and the records from employees and machines that match on device_id

☐ All columns of the employees and machines table, all records from the machines table, and the records from employees that match on device_id

☒ Incorrect
Please review the video on types of joins [?].

8. You are working with the Chasook database. You want to return the company and country columns from the customers table. Replace --?? with the missing information to complete the query. (If you want to undo your changes to the query, you can click the Reset button.) 1 / 1 point

```
1 SELECT company, country
2 FROM customers
3 WHERE company = "JetBrains s.r.o.";
--??
```

Run

Reset

Company	Country
JetBrains s.r.o.	Czech Republic

In what country is JetBrains s.r.o. located?

- ☒ Czech Republic
- ☐ United States
- ☐ Brazil
- ☐ Germany
- ☐ Correct

9. You are working with the Chasook database and are responsible for filtering for invoices with a total that is more than 20. Replace --?? with the missing information to complete the query. (If you want to undo your changes to the query, you can click the Reset button.) 1 / 1 point

```
1 SELECT *
2 FROM invoices
3 WHERE total > 20
4 --??
```

Run

Reset

InvoiceId	CustomerId	InvoiceDate	BillingAddress	BillingCity	BillingState	BillingCountry	BillingPostalCode	Total
96	45	2018-02-18 00:00:00	Frisdnet Vrt, 58	Budapest	None	Hungary	H-1073	21.86
124	46	2017-04-28 00:00:00	1, Orlathan Street	Dublin	Dublin	Ireland	None	21.86
229	26	2012-08-25 00:00:00	2211 W Berry Street	Fort Worth	TX	USA	76128	21.86
444	6	2013-11-10 00:00:00	Wlilaa 3176-6	Prague	None	Czech Republic	14500	21.86

How many invoices have a total that is more than 20?

- ☐ 1
- ☒ 4
- ☐ 3
- ☐ 2
- ☐ Correct

10. You are working with the Chasook database and are responsible for filtering for the customers that have a value of 'USA' in the country column and have a value of 'Frank' in the first_name column. Replace --?? with the missing information to complete the query. (If you want to undo your changes to the query, you can click the Reset button.) 1 / 1 point

```
1 SELECT *
2 FROM customers
3 WHERE country = "USA" and first_name="Frank"
4 --??
```

Run

Reset

CustomerId	FirstName	LastName	Company	Address	City	State	Country	PostalCode	Phone	Fax	Email	SupportResourceId
16	Frank	Harris	Google Inc.	1600 Amphitheatre Parkway	Mountain View	CA	USA	94041-1121	+1 (650) 251-0800	+1 (650) 251-0800	fharris@google.com	4
24	Frank	Ralston	None	162 E Superior Street	Chicago	IL	USA	60611	+1 (312) 332-3232	None	fralston@gmail.com	3

How many customers live in the USA and have the name Frank?

- ☒ 2
- ☐ 1
- ☐ 4
- ☐ 3
- ☐ Correct