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# Ruby Monstas



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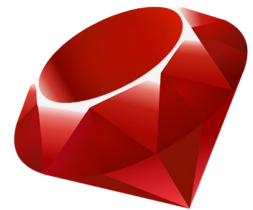
Session 28

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# Agenda

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Introduction to databases, Part 1  
Exercises



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# Introduction to databases

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Part 1

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# CSV Recap

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users.csv

```
first_name,last_name,city,shoe_size
```

```
Tatjana,Abt,Bern,42
```

```
Kasimir,Spitznogle,Luzern,46
```

```
Niklas,Laberenz,Zürich,42
```

```
Konstanze,Gotti,Zürich,43
```

```
Romy,Ebner,Bern,38
```

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# CSV Recap

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users.csv

column

table

first_name	last_name	city	shoe_size
Tatjana	Abt	Bern	42
Kasimir	Spitznogle	Luzern	46
Niklas	Laberenz	Zürich	42
Konstanze	Gotti	Zürich	43
Romy	Ebner	Bern	38

row

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# Enter SQLite!

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SQL: Structured Query Language

SQLite: One implementation of SQL

Many other implementations are available:

MySQL, PostgreSQL, Microsoft SQL Server, ...

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# Creating a table

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Create a new table called “users” which has the following columns: first\_name (string), last\_name (string), city (string), shoe\_size (integer)!

```
CREATE TABLE 'users' (first_name string, last_name string,  
city string, shoe_size integer);
```

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# Inserting data into a table

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Insert a new row into the table “users” with these values: “Tatjana”, “Abt”, “Bern”, 42.

```
INSERT INTO 'users' VALUES ('Tatjana', 'Abt', 'Bern', 42);
```

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# Some more data...

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```
INSERT INTO 'users' VALUES ('Kasimir', 'Spitznogle', 'Luzern', 46);  
INSERT INTO 'users' VALUES ('Niklas', 'Laberenz', 'Zürich', 42);  
INSERT INTO 'users' VALUES ('Konstanze', 'Gotti', 'Zürich', 43);  
INSERT INTO 'users' VALUES ('Romy', 'Ebner', 'Bern', 38);
```

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# Who are our users from Bern?

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Give me the first name and the last name of all the rows from the table user, where the city is “Bern”!

```
SELECT first_name, last_name FROM users WHERE city == 'Bern';
```

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# What's the biggest shoe size?

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Give me the maximum value of the column shoe\_size from the table user!

```
SELECT max(shoe_size) FROM users;
```

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# Other weird queries

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Give me the values of the column city from the table users whose first\_name starts with a “K”!

```
SELECT city FROM users WHERE first_name LIKE 'K%';
```

Give me the values of the column shoe\_size from the table users whose first\_name or last\_name contain a “z”!

```
SELECT shoe_size FROM users WHERE first_name LIKE '%z%' OR  
last_name LIKE '%z%';
```

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# Your feedback, please?

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<http://goo.gl/forms/rUrZqOPNq6> (Session 27)

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# Time to practice

