

# Spark SQL



# Objective

Use Spark SQL *programmatically*



# Objective

Use Spark as a "big data" database



# SQL

Universal standard for accessing structured data

Abstraction over DataFrames for engineers familiar with databases

Supported in Spark

- programmatically in expressions
- in the Spark shell

Spark SQL

- has the concept of "database", "table", "view"
- allows accessing DataFrames as tables

DataFrame vs table

- identical in terms of storage and partitioning
- DataFrames can be processed programmatically, tables in SQL

# Spark Tables

## Managed

- Spark is in charge of the metadata + the data
- if you drop the table, you lose the data

## External (unmanaged)

- Spark is in charge of the metadata only
- if you drop the table, you keep the data

**Spark rocks**

