

Querying Data from PostgreSQL

UNDERSTANDING THE RELATIONAL MODEL



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Overview



Data comes in many forms

SQL and its special purpose

A word about our environment

Relational databases



How do we make the connection?



Database

Data is stored in many forms,
but most often in a **relational
database**



SQL

Structured query language
(SQL) exists solely to interact
with data



SQL

SQL platforms comply with ANSI standard

Allows for use across databases

Databases can add additional features

Aids learning other query languages



PostgreSQL

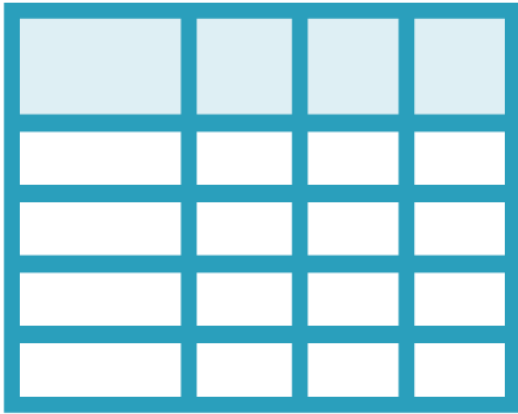
PostgreSQL complies with ANSI standards

Open-source and freely available

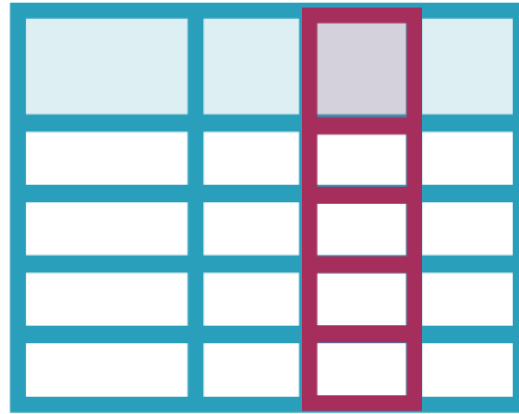
pgAdmin



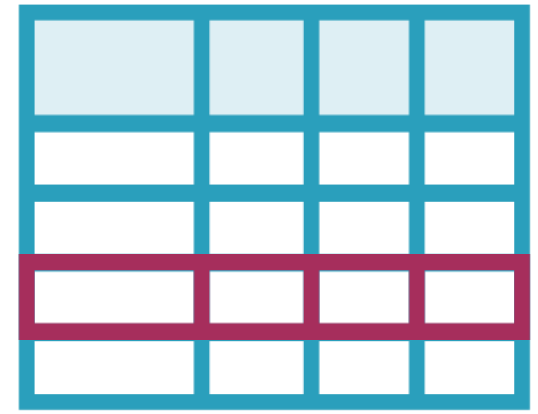
Structure of a Database



Table



Column
Field
Variable



Row
Record



Relationships

People table



PersonID	FirstName	LastName
123	John	Smith
124	Jane	Doe
125	Bob	Clark

Address table



AddressID	PersonID	Address
9001	123	1 Main St.
9002	124	9 Cherry Dr.
9003	125	8 Mesa Ave.

Demo



Exploring structures in pgAdmin



Summary



Relational databases are tools that allow us to store large quantities of information

SQL is the tool that allows us to work with those databases

