Introduction to SQL (Update)

INTRODUCTION

Jon Flanders

@jonflanders www.jonflanders.com

Structured Query Language (SQL) is a special-purpose programming language

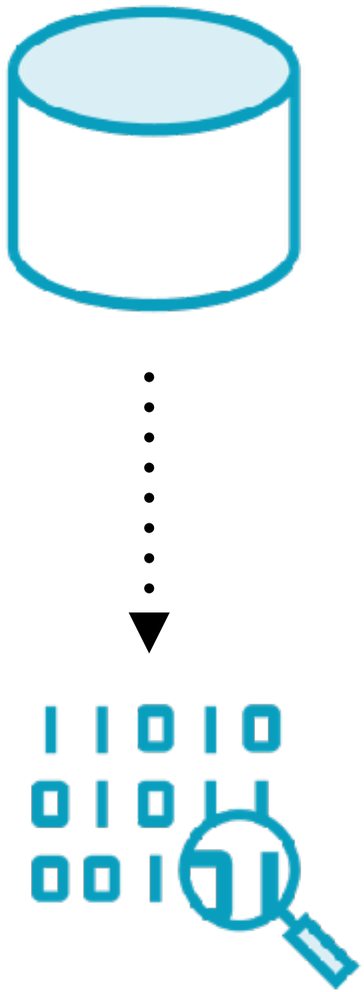
SQL's Purpose

To manipulate sets of data

Typically from a relational database

ANSI and ISO standards

In this course, I'll stick to standards-based SQL



A database is ...

A container to help organize data

A way to efficiently store and retrieve data

Relational

A way to describe data and the relationships between data entities.

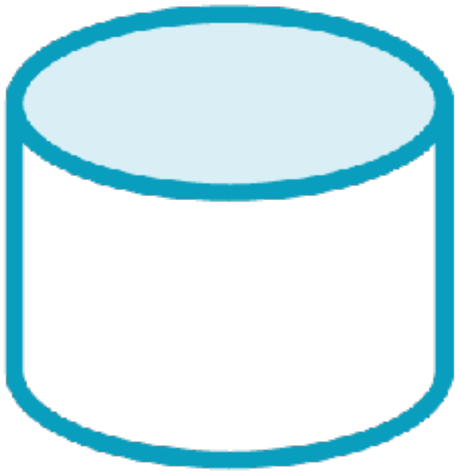


Table Name: Contacts

First Name	Last Name	Email
Jon	Flanders	jon@pluralsight.com
Fritz	Onion	null

What are all my contacts that have a last name that starts with F?

First Name	Last Name	Email
Jon	Flanders	jon@pluralsight.com
Fritz	Onion	null

First Name	Last Name	Email1	Email2
Jon	Flanders	jon@pluralsight.com	jon2@gmail.com
Fritz	Onion	fritz@pluralsight.com	null

A Better Solution – Normalization

Key	First Name	Last Name
1	Jon	Flanders
2	Fritz	Onion

Key	Person Key	Email
1	2	fritz@pluralsight.com
2	1	jon@pluralsight.com
3	1	jon@foo.com

Database design is important; it controls the questions you can ask later.

SQL is the language you use to ask the questions.

Summary

SQL is a powerful declarative language that you can grasp by understanding a few basic concepts