

PostgreSQL Bootcamp

Explore, modify, and export data from databases in PostgreSQL. Learn foundation concepts like tables, data types, and queries, and advanced techniques like join statements, subqueries, and stored procedures.

Course Outline

Foundations

Basic Concepts

- What is a relational database?
- What is SQL?
- What is Postgres?
- Database tables
- Rows and columns
- Data types

Graphical User Interface

Object Explorer

- Query Window
- Results Grid
- Setting Options

Querying

Select Statements

- Syntax of a SELECT statement
- Selecting specific columns
- Using a LIMIT clause
- Distinct records
- Using a WHERE clause
- Field and Table Aliases

Filtering and Aggregating

- Filtering with Text Criteria
- Wildcard Filters
- Filtering with Numeric Criteria
- Using SUM, COUNT and AVG
- Using MAX and MIN
- Group-by Statements

Adding Data

Creating tables

- Primary keys
- Foreign keys
- Data normalization
- Create statement
- Constraints

Inserting data

- Insert statement
- Nulls, empty strings and zeros
- Update Statement
- Setting Conflict Actions

Combining tables

Joins

- Inner Joins
- Full Outer Joins
- Left/Right Joins

Views

- Creating a view
- Performance issues

Advanced Topics

Advanced querying

- Subqueries
- Querying JSON data

Stored Procedures

- Creating a stored procedure
- Transactions
- Temp Tables

Functions

- String Functions
- Cast Function
- Convert Function
- Rounding Functions

Dealing with CSVs

- Loading data from a CSV
- Exporting a table to CSV

Contact

📞 212-684-5151

✉️ nyc@careercenters.com

🌐 www.careercenters.com