

## Module 7

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### Looking Ahead

In this module, you'll learn about data modeling, engineering, and analysis. Applying your knowledge of DataFrames and tabular data, you'll create entity relationship diagrams (ERDs), import data into a database, troubleshoot common errors, and create queries that use data to answer questions. Databases are used everywhere—small and large businesses, and even individuals working on personal projects—and SQL is one of the most widely used query languages. Its ability to organize and query data, especially on a large scale, makes SQL knowledge a highly sought after skill in the workforce.

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### What You Will Learn

By the end of this module, you will be able to:

- Design an ERD that will apply to the data.
  - Create and use a SQL database.
  - Import and export large CSV datasets into pgAdmin.
  - Practice using different joins to create new tables in pgAdmin.
  - Write basic- to intermediate-level SQL statements.
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### Planning Your Schedule

Here's a quick look at the lessons and assignments you'll cover in this module. You can use the time estimates to help pace your learning and plan your schedule.

- Introduction to SQL (15 minutes)
- Getting Started with PostgreSQL and pgAdmin (45 minutes)
- Data Modeling (1 hour)
- Data Engineering (3 hours)
- Data Analysis (4 hours)

- Application (5 hours)

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