**Course Objectives**

In this course, we are going to focus on **three** learning objectives:

1. *Populate a relational table with SQL code.*
2. *Manage data in a relational table using SQL code.*
3. *Troubleshoot common SQL errors.*

By the end of this course, you will be able to **use the SQLiteStudio DBMS to write the SQL code to manipulate the data in a database table by inserting new data, and updating and deleting existing data.**

**Course Structure**

**This course is divided into 3 parts:**

1. Course Overview: This introductory reading material.
2. Manipulating Data with SQL: This is the hands on project that we will work on in Rhyme.
3. Graded Quiz: This is the final assignment that you need to pass in order to finish the course successfully.

**Project Structure**

The hands on project on **Manipulating Data with SQL** is divided into following tasks:

**Task 1: Know Your Tables**

**Task 2: The INSERT Command**

**Task 3: When it Doesn't Work**

**Task 4: The UPDATE Command**

**Task 5: The Batch Load**

**Task 6: DELETE and DROP**

**Meet the Instructor**

*I'm your instructor, Judy Richardson. It's my pleasure to guide you as you learn to write SQL code that manipulates data in relational database tables. My career began in Information Technology, working with databases, programming, and web development. I also have some years of experience in higher education, where I put those IT skills to work for my students. I hope you enjoy the course and develop a new understanding of the power of SQL in managing data.*

**Manipulating Data with SQL**

Now we will learn about Manipulating Data with SQL. We will use SQLiteStudio to write SQL code that inserts, updates, and deletes data by completing the following:

* Know Your Tables - You will investigate and analyze tables to learn to identify data types and constraints that affect the way you manipulate table data.
* The INSERT command - You will use SQL to insert rows of new data into a relational database table.
* When it Doesn't Work - You will practice troubleshooting methods to help you locate and repair errors in SQL code.
* The UPDATE Command - You will write SQL code to modify existing pieces of data within a table row.
* The Batch Load - You will develop and run a script that loads a relational table with multiple rows at a time.
* DELETE and DROP - You will learn methods of eliminating data from existing tables.

While you are watching me work on each step, you will get a cloud desktop with all the required software pre-installed. This will allow you to follow along the instructions to complete the above mentioned tasks. After all, we learn best with active, hands-on learning