Exercise 1.6: Connecting to Databases in Python

Learning Goals

- Create a MySQL database for your Recipe app

Reflection Questions

1. What are databases and what are the advantages of using them?
    a. Databases are sets of tables, built from rows & columns, that are used to store data in an efficient and orderly manner. By using databases, massive quantities of data can be kept organized, sorted and searched in quick order, allowing less load on the frontend to pull data for the user.

2. List 3 data types that can be used in MySQL and describe them briefly:
    a.

Data type	Definition
VARCHAR	A variable-length non-binary string, a string of characters other than binary and a collation that is compatible with the character set.
TEXT	A small non-binary string
BLOB	A small BLOB(binary large object), a binary string of variable length, stored as a sequence of bytes or octets. BLOB data type is generally used to store large files such as images, media files such as video and audio clips in the database.

3. In what situations would SQLite be a better choice than MySQL?
    a. SQLite is best used with smaller databases that don't have significant memory requirements. As your database grows, SQLite is less likely to be the optimized choice, but in projects with a set database that doesn't change, SQLite is likely an ideal option.

4. Think back to what you learned in the Immersion course. What do you think about the differences between JavaScript and Python as programming languages?
    a. Python feels more like I'm typing using English as a language, and the use of plain language makes it easier for me to interpret code and solve bugs than with JavaScript. JavaScript however, appears more codified, and in being structured in a very specific way, ensures uniformity across projects.

5. Now that you're nearly at the end of Achievement 1, consider what you know about Python so far. What would you say are the limitations of Python as a programming language?
    a. Python doesn't seem like it works with mobile development, and it uses significantly more memory than other languages. It's database infrastructure also feels less robust than JavaScript.