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?

   Ans: In Python, databases are tools that help organize, store, and retrieve data efficiently. They maintain data in a standardized format, making it easier to store and access. Databases can be secured through password access, and since they use a universally acceptable format, they can be accessed using applications other than Python as well.

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

Data type	Definition
VARCHAR(n)	String of variable length, with n representing the maximum number of characters
INT	Standard integers
FLOAT	Floating-point decimal numbers

3. In what situations would SQLite be a better choice than MySQL?

   Ans: SQLite is ideal for simple, low-traffic situations, offering easy setup and low maintenance. It's a great choice for sing-user or prototype environments, especially when lightweight, embedded database is sufficient.

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?

   Ans: JS is for web browsers, enhancing interactivity. Python is versatile, used for web development, data analysis, and AI. Each has unique strengths; JS for web tasks, Python for broader applications.

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?

   Ans: Python has limitations such as slower execution speed, increased memory usage, and challenges with multi-threading. These aspects may impact its suitability for resource-intensive tasks or low-level system programming.