

## 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?

Databases are collections of stored data/information that are structured in a standardized format for better organization and accessibility. Their advantages are their standardized formatting, higher security through password access and their ability to be utilized by various programs.

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

Data type	Definition
INT	These are whole numbers
FLOAT	These are numbers with decimals
VARCHAR(n)	String of alphanumeric characters, with (n) being the maximum character limit

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

SQLite would be better if you were working with a simple database or if you wanted to test a database without setting up a whole database engine.

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?

On a personal level I find Python to be a little easier to understand and to make sense of than JavaScript. It makes more intuitive sense to me with its straightforward syntax, which is a big advantage over JavaScript which is harder to read. I think because of its relative simplicity it is also easier to maintain Python code as well. The downside is that Python often needs an interpreter to work on most computers whereas JS works on most browsers.

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?

Python is used primarily for backend coding, so not as versatile as JS in terms of client side applications.