

Exercise 1.6: Connecting to Databases in Python

1. What are databases and what are the advantages of using them?

Databases are where we store data. They allow data to be organized, managed, and stored in a structured way. They're a great way to organize data and access it easily. Databases also provide a great solution to redundant data.

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

Data type	Definition
INT	Used to store whole numbers, both positive and negative
VARCHAR	Used to store strings
DATE	Stores dates using the format YYYY-MM-DD

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

SQLite would be a better choice when working with smaller projects. It is also a good choice to provide local storage in mobile development.

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?

I do agree that JavaScript has a much higher learning curve than Python. The syntax of Python is far easier to read. I also like the versatility of Python. It can be used for general tasks, automation, data science and more.

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?

There are a few things that limit Python as a language. One of the main being the high consumption usage of the language. Python has a huge collection of libraries which can lead to conflicts amongst dependencies. However, this can be managed by using a virtual environment, like `venv`.