

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

Databases are collections of information, they are advantageous because they can store organized sets of data securely.

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

Data type	Definition
VARCHAR(n)	String of any length under the maximum (n) amount of characters
Float	Decimal numbers that can be used for numbers like prices
Datetime	Date and time values

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

SQLite is better for smaller applications that don't require an installation or setup and stores files in .db files that can be modified with Python or other applications.

Think back to what you learned in the Immersion course. What do you think about the differences between JavaScript and Python as programming languages?

Before starting intro to Python, I was convinced that I would end up using Javascript about 90% of the for backend development, but learned that Python is more beneficial for some features and makes it easier to use math operations (ex. `calc_difficulty` in the recipe app). I also like how easy it is to connect to a MySQL database. Proper indentation and using `cursor.execute` is still a bit confusing and throw me off a bit but I think that will get better with experience.

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 does not have a lot of the functions that Javascript or other languages do, and is not good for low level programming tasks. Python is slower and more resource intensive than other languages, so personally I would only use it where another language would not suffice. A major limitation is that it can't be used for frontend development.