## 1.6 Learning Journal

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

Databases are organized collections of structured data that are designed to efficiently store, retrieve, and manage information. Some advantages of using databases are data organization, data integrity, data consistency, and data security.

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

Data type	Definition
VARCHAR	VARCHAR is used to store variable length character strings, commonly used to store textual data such as names and descriptions. The length can be specified to the max number of characters allowed.
INT	INT is used to store integer values. Used to store whole number data.
FLOAT	FLOAT is used to store floating-point decimal numbers.

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

SQLite requires no installation or setup and allows you to store data in simple .db files so it would be better to use SQLite when working with smaller simple databases or when testing a database to avoid having to set up an entire 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?

I think Python has been an easier language to pick up on. It is cleaner and easier to organize code and has more built in functions. I have noticed that Python is more backend programming while JavaScript was more frontend.

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?

I would say that executing line by line, Python can be slower in terms of execution speed. Also the limitation of not being able to develop mobile apps.