Task 1.6:

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

Databases are secure and standardized storage formats alternative to the norm local storages. Databases have far more advantages to regular local storage in a way that it's more secure where a user is required to pass through password access, have formats consistent with the international standards and can be accessed using applications.

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

Data type	Definition
Varchar(n)	is string with maximum length restricted to n.
Int	Integers are standard zero to infinity and zero to negative infinity numbers without decimal points.
Float	are numbers with decimal floating points ranging from negative infinity to positive infinity.

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

SQLite is a smaller version that needs no installation and stores data in .db files which can be modified directly with applications. It is useful for databases that are simple and don't require setting up an entire database.

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 the first thing in focusing on difference between python and other languages is the simplicity and readability of python which makes its learning curve relatively flattened. Python also has many built in methods and functions that can be used without installing other packages. But the main difference could be that python is mainly used for backend/server-side programming while JS on frontend programming and user interaction as it has full support for DOM manipulation. Both have fairly the same large community support.

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?

The fact that python runs and executes line by line makes it slow and on sector where efficiency is key, this is major limitation of python. Furthermore, access to databases through python is not user-friendly/ not straight forward and it's not used to make mobile and web application despite its simplicity and versatility.