

## **Exercise 1.6**

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

Databases store collections of data on a device or in a cloud. They are useful because they organize data so that it is easy to read, can be secured by passwords, and allow users to easily interface with and modify data.

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

<b>Data type</b>	<b>Definition</b>
VARCHAR(n)	String of variable length. “n” represents the max amount of characters.
INT	Standard Integers
FLOAT	Decimal numbers

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

SQLite is a better choice for simple databases that do not contain a lot of complex information. SQLite could be used for simple web pages.

### **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?**

Python and JavaScript are very similar in a lot of ways but have several key differences that I have noticed so far. The biggest difference that I have seen is that JavaScript uses multithreading and Python can only run one thread at a time. This has made testing in Python more tedious for me so far. Furthermore, I think that Python is more user friendly because it has fewer variables and more built-in libraries.

### **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?**

As I mentioned before, the single thread approach used by Python is tedious and limiting. But I am sure there are workarounds to help speed up testing.

