## **Exercise 1.1: Getting Started with Python**

### **Learning Goals**

* Understand how Python can be used for web development and its benefits.
* Set up a development environment to work with Python.

### **Reflection Questions**

#### **1. What's the difference between frontend and backend web development? If you were hired to work on backend programming, what tasks would you be working on?**

**Answer:** Frontend development is all about what users see and interact with on a website, like buttons, forms, and other visual elements. It’s built using technologies like HTML, CSS, and JavaScript. On the other hand, backend development deals with everything behind the scenes, such as managing databases, handling authentication, and processing data. If I were hired for a backend role, I’d be working on things like managing user accounts, interacting with databases, securing sensitive data, and building APIs that communicate between the frontend and backend.

#### **2. If your team was deciding between using JavaScript or Python for a project, and you thought Python was the better choice, how would you explain the differences and why Python might be better?**

**Answer:** Both Python and JavaScript are powerful and relatively easy-to-learn programming languages. However, Python stands out because of its clean and readable syntax, which makes it easier for developers to read and maintain code over time. This is a big advantage if the project grows and more developers join in. Python also has an extensive library of packages and a very active community that regularly updates it, making it a reliable choice for long-term projects. JavaScript is great too, especially for frontend development, but if we're focusing on backend work, Python offers better readability and organization.

#### **3. Now that you’ve had an introduction to Python, what are three goals you have for your learning during this course?**

**Answer:**

* I want to improve my understanding of object-oriented programming (OOP) in Python.
* I’d like to learn how to write Python scripts to automate repetitive tasks.
* I want to dive deeper into backend development, focusing on how Python handles databases, APIs, and server-side tasks.