

# Pre-Work: Before You Start the Course

## Reflection questions (to complete before your first mentor call)

1. What experiences have you had with coding and/or programming so far? What other experiences (programming-related or not) have you had that may help you as you progress through this course?

I have experience with R, SQL, Tableau, and a little Python, analyzing data. I started coding after I took "Google Data Analysis" course. I became familiar with C programming through CS50 course. Then I learned JavaScript and its libraries and frameworks through CareerFoundry bootcamp.

2. What do you know about Python already? What do you want to know?

Python is an OOP language and is commonly used in data science and data analysis. It's a great tool for data manipulation and visualization.

I would like to know more about using Python for backend and I would also like to advance my Python skills for data science.

3. What challenges do you think may come up while you take this course? What will help you face them? Think of specific spaces, people, and times of day of week that might be favorable to your facing challenges and growing. Plan for how to solve challenges that arise.

Might be challenges with code and bugs. I can use stack overFlow and documentations to find out how to solve the problems. And I usually work in a quiet place to help remove the distractions.

Remember, you can always refer to [Exercise 1.4](#) of the Orientation course if you're not sure whom to reach out to for help and support.

## Exercise 1.1: Getting Started with Python

### *Learning Goals*

- Summarize the uses and benefits of Python for web development
- Prepare your developer environment for programming with Python

## Reflection Questions

1. In your own words, what is the difference between frontend and backend web development? If you were hired to work on backend programming for a web application, what kinds of operations would you be working on?  
Front end is what the user sees. How the app looks like and how it functions from a user's view. Backend is server-side programming. As a backend developer I would be Developing the RESTful API. Implementing Authentication and authorizations. Managing databases, implementing business logic.
2. Imagine you're working as a full-stack developer in the near future. Your team is asking for your advice on whether to use JavaScript or Python for a project, and you think Python would be the better choice. How would you explain the similarities and differences between the two languages to your team? Drawing from what you learned in this Exercise, what reasons would you give to convince your team that Python is the better option?  
(Hint: refer to the Exercise section "The Benefits of Developing with Python")  
Python is easy to use because of its readability and it's easy to understand.  
It has simple built-in package management, using Python libraries like math helps make coding Easier and also it has a strong community for support.
3. Now that you've had an introduction to Python, write down 3 goals you have for yourself and your learning during this Achievement. You can reflect on the following questions if it helps you. What do you want to learn about Python? What do you want to get out of this Achievement? Where or what do you see yourself working on after you complete this Achievement?  
I would like to learn Python for backend web development as well as Data analysis, and machine learning. I would like to learn how to automate tasks with Python and how to do web scraping. I would like to master Python and implement my Python skills into Generative AI and cloud computing.