# Exercise 1.7: Finalizing Your Python Program

## Learning Goals

- Interact with a database using an object-relational mapper
- Build your final command-line Recipe application

## Reflection Questions

1. What is an Object Relational Mapper and what are the advantages of using one?
   - ORM converts the contents and structure of a database into classes and objects that can be interacted with directly. They can save the developer time, not worry about SQL syntax, and allow the developer to focus more on how the application can operate logically for the end-user.

2. By this point, you've finished creating your Recipe app. How did it go? What's something in the app that you did well with? If you were to start over, what's something about your app that you would change or improve?
   - I think creating the recipe app went well overall. By the end of these exercises, I've gotten a better handle on how Python operates and its uses. The recipe app gave me a good foundation in databases and the different ways I can manipulate them. I think practicing coding throughout and seeing the end product has given me a good foundation to understand what something may look like as I'm coding and what I can do to make more readable and user-friendly.

3. Imagine you're at a job interview. You're asked what experience you have creating an app using Python. Taking your work for this Achievement as an example, draft how you would respond to this question.
   - During my Python course at CareerFoundry, I built a recipe app starting at the foundational level with writing simple scripts and testing them in an iPython shell where the results were stored locally. I progressed and built on this foundation writing code with object-oriented programming methods and building/managing the MySQL database. I finished up the recipe app by then introducing SQLAlchemy to make the management simpler and built the app to allow users to create, read, update, and delete recipes through a full menu of functions allowing them to do so. I think the app was well structured and user-friendly enough that anyone could use it right away.

4. You've finished Achievement 1! Before moving on to Achievement 2, take a moment to reflect on your learning in the course so far:
    - What went well during this Achievement?
        i. I think I developed a good foundational knowledge of Python and its uses. I feel pretty comfortable in reading and understanding its syntax and how something may operate and look when the app is launched.
    - What's something you're proud of?
        i. I pretty proud of how my end results looked, both from a code and operating app view. I did my best to make my code readable and left comments that would allow another developer to understand what is being done without me there to explain it to them.
    - What was the most challenging aspect of this Achievement?
        i. I still think there is improvement on my end to get a better handle on things like loops and general structure. Initially, with each task I'd have a hard time getting started and knowing what to do right away, but help from my notes, the course, and a little help from ChatGPT, I'd have a good handle on what I as producing and coming up with ideas of my own to make incremental changes that make the outcome a bit more friendly and palatable.
    - Did this Achievement meet your expectations? Did it give you the confidence to start working with your new Python skills?
        i. I feel much more comfortable with Python after this course and think I could use what I learned to work on some of my own projects and build out my portfolio.
    - What's something you want to keep in mind to help you do your best in Achievement 2?
        i. Just to take it at my pace. I think the course has given me the tools to keep going, I just need to be thorough and methodical in my approach while reflecting on the lessons and how they'll be used in the tasks going forward.

Well done—you've now completed the Learning Journal for Achievement 1. As you'll have seen, a little metacognition can go a long way!