❮ **Previous**   **Next** ❯

Unit 1 / Lesson 3

Functions and Classes

🕐 Estimated Time: **8-9 hours**

In this lesson, you'll learn about functions and classes. These are both features which will help you to provide structure to the code you write.

The first half of the lesson looks at functions, which allow you to group together and re-use pieces of code that accomplish a given task. You'll use functions in nearly every serious program you write, as they enable you to write reusable, clean, maintainable code.

We'll start off by seeing how to define and call functions. Next you'll get some practice creating functions, then you'll complete a project which will use your skills to slake the thirst of hardy seafarers.

The second half of this lesson will look at Python classes. Classes give us a way to bundle together behaviors and properties to model entities and processes. For instance, your car could be modeled in software as an object with a weight property, wheels, and a maximum speed. It also has behaviors like braking, accelerating, and signalling. Learning to use classes will give you a powerful tool for breaking down problems into easily understood sections.

You'll get practice with Python's syntax for defining and instantiating classes and be asked to model a real world situation using them. You'll use your solution to the problem to begin thinking about what makes good software design.

Goals

- Gain a conceptual understanding of functions

- Know how to write custom functions in Python

- Be able to break a problem down into functions that can be used to solve it

- Understand the basic principles of object oriented programming

- Know how to create and use classes in Python

- Start to use software to model real world things and processes

---

☆ ☆ ☆ ☆ ☆   ·   Report a typo or other issue

Previous   Next