Sara O’Neal

May 18, 2021

Foundations of Python Programming (IT FDN 110 A)

Assignment 06

GitHub: <https://github.com/sarao3/IntroToProg-Python-Mod06>

# Functions in Python

## Introduction

The purpose of this paper is to provide a brief overview of how to complete the sixth assignment in the Foundations of Python Programming course, which covers how to work with functions and classes in Python.

## Working with Functions

The following steps outline an example of how to define function and call a function within a Python script. When a function is called, the statements that are defined within it are executed.

1. A function is defined by starting with the keyword “def” followed by the name of the function. In Figure 1 below, the function is called “add\_data\_to\_list.” After the name of the function, a programmer can pass values into the function for processing. These values are known as parameters and there is no limit as to how many parameters can be included. Within the separation of concerns concept (Data, Processing, Presentation), the action of defining a function should be included within the Processing section.

Graphical user interface

Description automatically generated with low confidence

**Figure 1:** A function called “add\_data\_to\_list” is defined with parameters “task”, “priority” and “list\_of\_rows” within the parentheses

1. It is important to note the difference between the term “parameter” and “argument”. Both of these terms are used in the industry. However, a parameter is the variable listed within the parentheses in the definition of a function. Whereas an argument is the value that is sent to the function when it is called (External source; <https://www.w3schools.com/python/python_functions.asp>)
2. Once a function has been defined, it can be called. A function is typically called within the main body of the Python script. In Figure 2, the “add\_data\_to\_list” function is called in order for the user to add a new task to their to do list.

Table

Description automatically generated with low confidence

**Figure 2:** The function called “add\_data\_to\_list” is called within the main body of the Python script

1. A programmer should note that the “add\_data\_to\_list” function is preceded by the word “Processor.” The term “Processor” was defined right after the Data section in order to group a set of processing functions that would be used later in the script.

Text, letter

Description automatically generated

**Figure 3:** A class called “Processor” is defined for a group of processing tasks within the Python script

## Summary

This week, we learned how to work with functions in Python. Functions are a great way for programmers to define a block of code or statement(s) that will be used throughout the Python script saving a programmer time and improving code readability.