Final Project Script Two Reflection

This assignment required the students to create a simple grocery list script. The importance of using lists, dictionaries, and loop types in Python are emphasized as well as how the use of those functions develops one’s approach to creating a script.

A common requirement for any programmer’s job is to manage and store data. One way Python makes this possible is through lists and dictionaries. Both lists and dictionaries have useful functions associated with them, which makes manipulating data efficient. A list could be useful when the data type is unknown or when it is not required to have specific value types stored. A dictionary, on the other hand, stores values based on their key and its associative value, which makes later retrieval useful. In the Final Project Script Two, a list, *grocery\_history,* is declared and is used to store a collection of dictionaries created by each grocery item collected from the user. The grocery history builds the list using the *append()* function. The main execution of the program is controlled by a *while* loop, which asks the user for input and checks to see if the user wants to continue adding items or quit to total the items. If the user quits (controlled by an if-else statement), the program outputs the items added and total.

Any programming task does not come without errors, otherwise one would be a perfect programmer. For this assignment, the type of errors I encountered included syntax errors in the formatting of the output of the total. I repeatedly forgot to format to two decimal places and include the modulo operator; I corrected it after reviewing my notes to see how to properly format the output. Another error that I encountered was an “EOF error when reading a line”. After spending a couple of hours on debugging, I realized that the incorrect input was being read at the line stating *item\_name = input(“Item name: “)*. This was corrected by adding a “\n” to the end of the line to ensure the file was reading the correct input in the correct sequence.

The proficient use of lists and dictionaries was achieved through this assignment as it challenged me to develop solutions to manipulate data and apply operations on dictionary keys and their values and build a list of grocery items.