Objectives:

* Creating Dictionaries and Sets & Object Serialization

Please submit screenshots of output this document for grading when completed.

**GitHub URL:** [CMPR-114/Module 8\_Strings, Sets and Dictionaries/M7 Class Exercise 7 Sets Dictionaries at master · ManVien/CMPR-114 (github.com)](https://github.com/ManVien/CMPR-114/tree/master/Module%208_Strings%2C%20Sets%20and%20Dictionaries/M7%20Class%20Exercise%207%20Sets%20Dictionaries)

**There are 4 Challenge Exercises, each worth 25%**

Tuples are **used to store multiple items in a single variable**.

**Project #1** (creating dictionaries). uses a dictionary to simulate a standard deck of

poker cards

Graphical user interface, text

Description automatically generated

Text

Description automatically generated

A picture containing background pattern

Description automatically generated

**Program’s code and output:**

Text

Description automatically generated

Text

Description automatically generated

Text

Description automatically generated

**Project #2** Keeps your friends’ names and birthdays in a

Dictionary

Table

Description automatically generated with medium confidence

Text

Description automatically generatedText

Description automatically generated

**Program’s output:**

Text

Description automatically generated

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Project #3** (creating list box using Tkinter)

**Challenge Exercise #1: Basketball**

**Text

Description automatically generated**

**Graphical user interface, text, application, email

Description automatically generated**

**Program’s code and output:**

**Text

Description automatically generated**

**A screenshot of a computer

Description automatically generated with medium confidence**

Text

Description automatically generated

Text

Description automatically generated

**Project #4** (Serialization)

Text

Description automatically generated

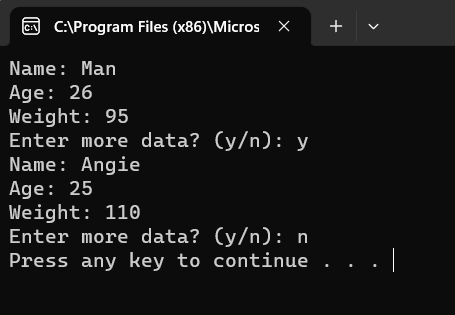
**Program’s code and output:**

**Text

Description automatically generated**

**Text

Description automatically generated**



Text

Description automatically generated

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generatedGraphical user interface, text

Description automatically generated

**Program’s code and output:**

Text

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

**Challenge Exercise #2:** continuing with project #3, print the food items.

**#2 print screen the running application with code below here.**

Graphical user interface, text

Description automatically generated

**Program’s code and output:**

**Text

Description automatically generated**

**Text

Description automatically generated**

Graphical user interface, text, application

Description automatically generated

**Project #5:** *Replacing* an old item in a list with a new item

Text

Description automatically generated

**Program’s code and output:**

**Text

Description automatically generated**

Text

Description automatically generated

Text

Description automatically generated

**Project #6:** This program will demonstrate how to insert and remove items in a list, and total and average number of items in a list.

(Text

Description automatically generatedText

Description automatically generated with medium confidence

**Program’s code and output:**

**Text

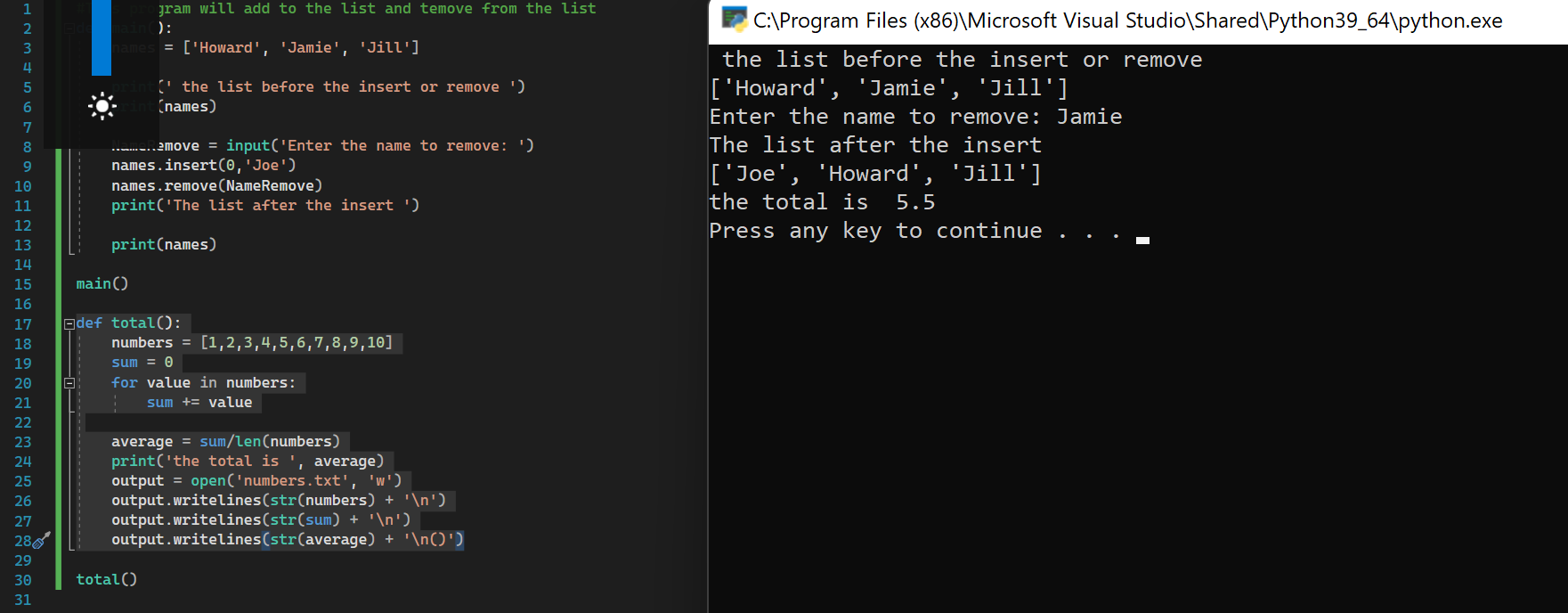
Description automatically generated**

**Text

Description automatically generated**

**Challenge Exercise #4:** continuing with project #6, the total function, output the numbers list to a text file.

**#4 print screen the running application with code below here.**



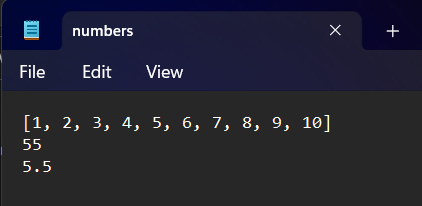
**Program’s code and output:**

**Text

Description automatically generated**

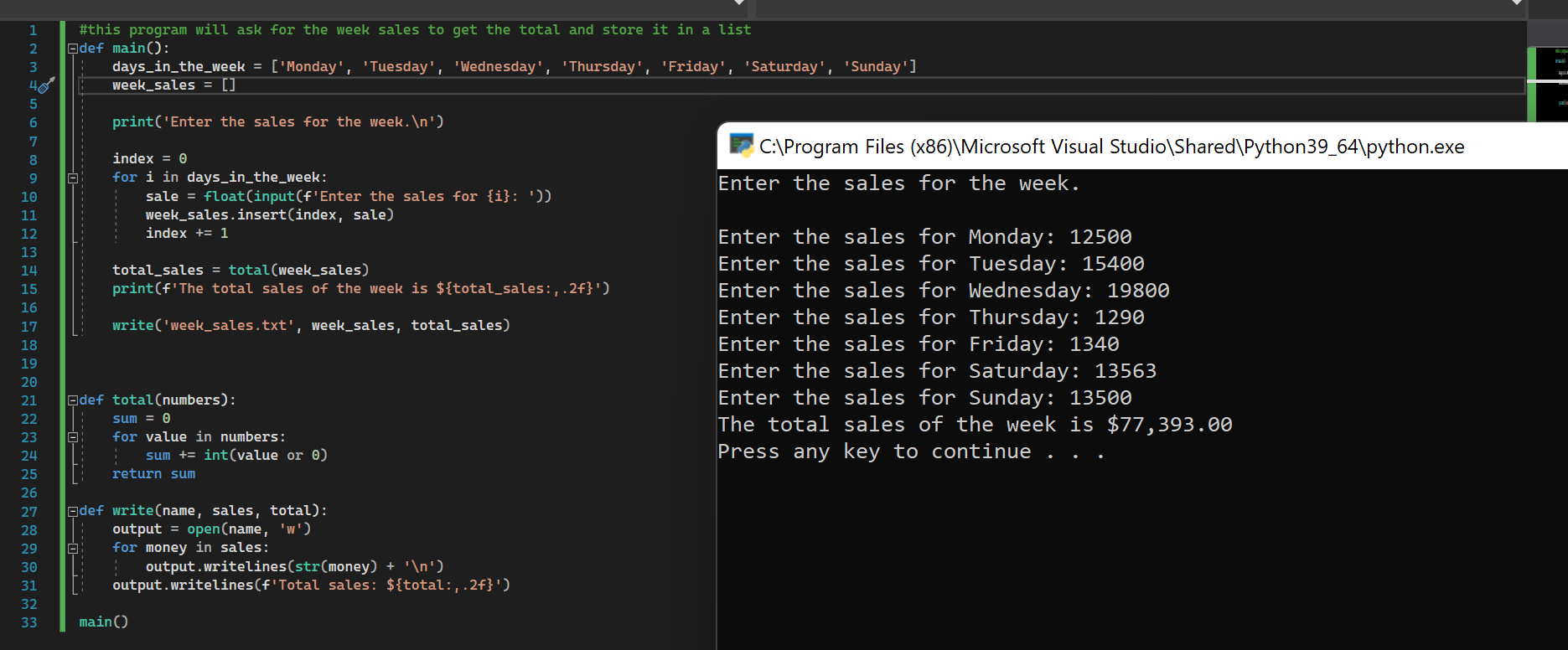
**Text

Description automatically generated**



**Challenge Exercise #4:** TOTAL SALES APP: Design a program that asks the user to enter a store’s sales for each day of the week. The amount should be stored in a list. Use loop to calculate the total sales for the week and display the result. Plus output the results into a text file as well as the console.

**#4 print screen the running application with code below here.**



**Program’s code and output:**

**Text

Description automatically generated**

Text

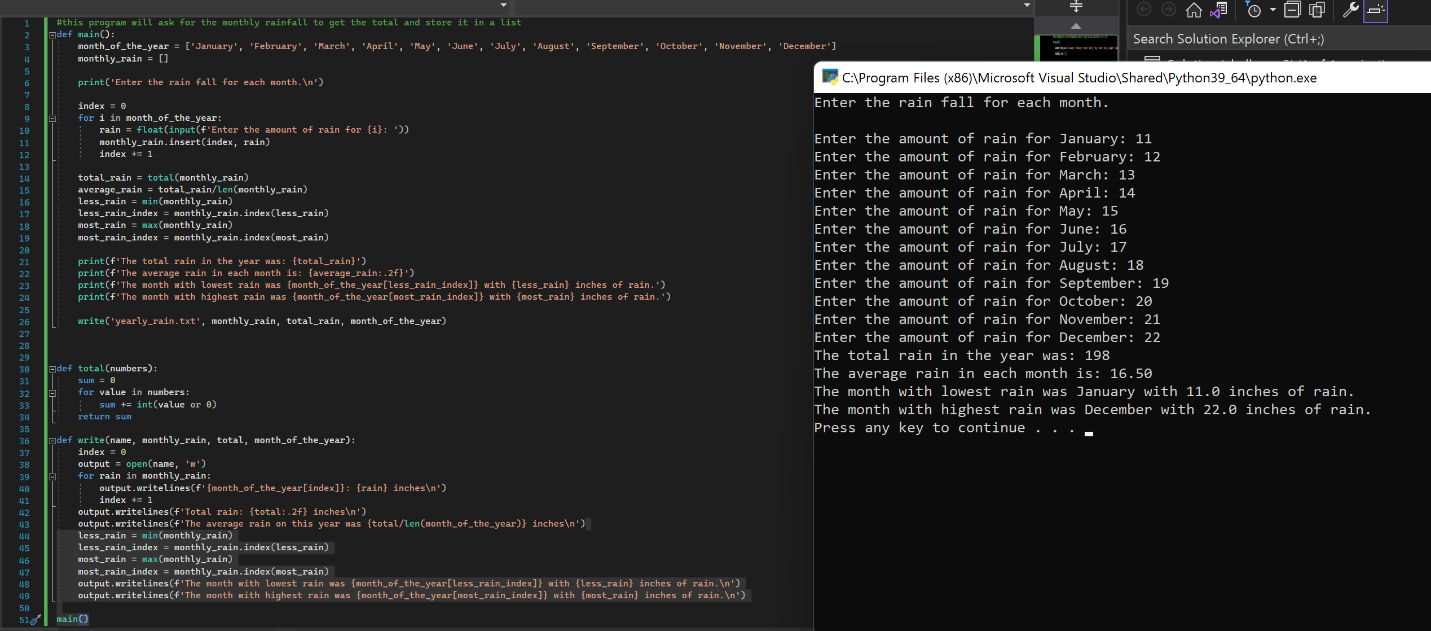
Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

**Challenge Exercise #5:** RAINFALL APP: Design a program that let’s the user to enter the total rainfall for each of the 12 months into a list. The program should calculate and display the total rainfall for the year, the average monthly rainfall, the months with the highest and lowest amounts of rainfall. Plus output the results into a text file as well as the console.

**#5 print screen the running application with code below here.**



**Program’s code and output:**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Submit this document to Module 7 Class Exercise #6**